Designing Diverse and Inclusive Futures – A Framework for a Co-creation Process

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The purpose of the thesis was to understand barriers and supporting elements to inclusion in a foresight co-creation process and develop tools that would support the design of diverse and inclusive foresight co-creation processes. The commissioning organization was a UN entity, and the project was one of the pilot phase explorations of their new workstream on foresight. The main concepts of the theoretical framework include diversity and inclusion, designing futures scenarios, and co-creation as an approach. A norm-critical, intersectional, and decolonial lens is used in exploring the concepts. The research-oriented development process used a Design Thinking process, with a qualitative research approach to data collection and analysis. The research and development process included research interviews, a benchmarking of foresight methods, and a validation workshop.

The results show that diversity is elemental to a foresight process, and diversity can be leveraged in the process through inclusion. Inclusion emerges from the facilitator's understanding of the context, using co-creation methods that support inclusion and designing the process with inclusion in mind from the beginning. The process facilitator needs to take into account societal power structures and norms that may affect the participants and reflect on their own bias and privilege. An inclusive process does not automatically produce future scenarios that have an inclusive mindset, so when designing the process different worldviews and understandings of time and the future should be considered. The participants should feel inspired, have a sense of ownership and take action towards the preferred future. As a development result, a Framework for a Diverse and Inclusive Foresight Co-creation Process and a Canvas for Diverse and Inclusive Foresight Process were developed. The Framework highlights the inclusion aspects of the co-creation process and the Canvas can be used to operationalize the inclusion aspects when planning a foresight process, providing the facilitator with questions for reflection. The Framework and Canvas can be used globally in a variety of organizations that are interested in leveraging inclusion in a foresight processes.

Keywords: inclusion, diversity, foresight, co-creation

Opinnäytetyön tarkoituksena oli ymmärtää esteitä ja mahdollistavia tekijöitä monimuotoiselle osallistumiselle ennakoinnin yhteiskehittämisprosesseissa, ja tuottaa työkaluja, jotka auttavat prosessien suunnittelussa. Toimeksiantaja on YK:n organisaatio, ja projekti oli yksi kokeilu heidän uudessa ennakointityössään. Teoreettinen viitekehys koostui moninaisuuden ja inkluusion käsitteistä ja tulevaisuusskenaarioiden muotoilusta, yhteiskehittäminen lähestymistapana. Normikriittistä, intersektionaalista ja dekoloniaalista näkökulmaa käytettiin viitekehyksen käsitteiden reflektointiin. Tutkimus- ja kehittämisprosessin rakenteena käytettiin muotoiluajattelun prosessia. Tutkimusaineisto kerättiin ja analysoitiin kvalitatiivisilla menetelmillä. Tutkimus- ja kehittämisprosessiin sisältyi tutkimushaastattelut, ennakointimenetelmien vertailuanalyysi ja validointityöpaja.

Tulokset osoittavat, että monimuotoisuus on keskeistä tulevaisuuden ennakointiprosessille. Inklusiivista ajattelua tarvitaan, että monimuotoisuuden hyödyt tulevat esiin. Inkluusiivisuus syntyy prosessissa kontekstin ymmärtämisen ja inklusiivisten yhteiskehittämismenetelmien kautta, ja kun prosessin suunnittelija ottaa inkluusionäkökulmat huomioon jo suunnitteluvaiheessa. Yhteiskehittämisen osallistujiin vaikuttavat yhteiskunnan normit ja valtarakenteet tulee ottaa huomioon suunnitteluvaiheessa, ja fasilitaattorin tulee ottaa huomioon omat tiedostamattomat ennakkoasenteensa ja etuoikeutensa. Inklusiivinen prosessi ei automaattisesti tuota tulevaisuusskenaarioita, jotka tukevat inklusiivista maailmankuvaa, joten erilaiset käsitykset ajan luonteesta ja tulevaisuudesta tulisi ottaa huomioon prosessia suunnitellessa. Prosessin osallistujien tulisi tuntea innostusta, psykologista omistajuutta ja halua toimia, jotta toivotut tulevaisuudet voivat toteutua. Kehittämistyön tuloksena syntyi Monimuotoisen ja inklusiivisen tulevaisuuden ennakoinnin viitekehys ja Monimuotoisen ja inklusiivisen tulevaisuuden ennakoinnin suunnittelumalli. Viitekehys visualisoi keskeiset inklusiiviset näkökulmat prosessiin ja suunnittelumalli operationalisoi viitekehyksen näkökulmat kysymyksiksi, joita fasilitaattori voi pohtia prosessin suunnittelun aikana. Viitekehys ja suunnittelumalli soveltuvat monenlaisten organisaatioiden ennakointiprosessien suunnitteluun globaalisti.

Asiasanat: monimuotoisuus, inklusiivisuus, ennakointi, yhteiskehittäminen

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1   Introduction

Increasingly, companies and organizations are noticing the values of diversity and inclusion for innovation, financial returns, and staff engagement (Brown 2016; (Lorenzo, Voigt, Tsunaka, Krentz & Abouzahr 2018; Nathan & Lee 2013; Hewlett, Marshall & Sherbin 2013; Phillips 2014, Bassett-Jones 2005; Hunt, Layton & Prince 2015; Bommel, Shaffer, Travis & Foust-Cummings 2021, 118). Diversity and inclusion (D & I) have become essential topics in the business world (Robinson 2006). Workforce diversity is one of the dynamic and complex challenges of our current world since the rapidly advancing technologies require new skilled employees globally, and organizations need to be prepared to engage diverse people to be future-oriented (Schreiber 2019, 4). Organizations are increasingly aware that they need to be informed by diverse people to gain perspective on their work (Frost & Alidina 2019, 15), and due to the interlinked nature of our existence in the global world, we cannot continue working in our comfort zone, with people similar to us (Ferdman, Prime & Riggio 2021). Worldwide movements like Black Lives Matter and Me Too are bringing to the forefront the human rights of marginalized groups, and there have been advancements in diversity & inclusion on the level of society, even if the progress is not linear and straightforward (Frost & Alidina 2019, 15).). On the other hand, co-creation as an approach offers a way to engage all people to solve some of the most complex problems we face (Mazzucato 2018; Ali & Liem 2015; Wasserman 2019). Co-creative approaches engage people in designing the futures they want for themselves and acting for them (Gudowsky & Peissl 2016; Ono 2003). In order to survive the challenges ahead, we need the ideas and perspectives of all the people, not just those who are traditionally in power (Ferdman, Prime & Riggio 2021).

Designing futures is a political act, and therefore the designers need to be aware of the norms, assumptions, and agendas they are reinforcing (Mazé 2019; Aalto et al. 2022, 16). Foresight is value-based since it shows possibilities for the future and allows people to think about which kind of futures they prefer (Kamppinen, Malaska & Kuusi 2002, 38-39). In foresight practices, the theme of inclusion and diversity is becoming more discussed recently, and it is acknowledged that there needs to be a reflection on who's voices, values, and worldviews are part of the process (Aalto et al. 2022, 16). If not reflected and queried upon, societal norms, power structures, and practices can be reproduced in the foresight process (Mazé 2019), and the preferred futures can become quite ethnocentric and lack pluralistic worldviews (Masini 1983; Masini 1982).

When it comes to foresight, western worldviews colonize the current futures exploration tools and methods (Kapoor 2001; Bisht 2017; Mazé 2019). It has also been argued that male voices dominate future studies (Hurley et al. 2007). Institutional foresight approaches also tend to

have a technological focus since the foresight methods hail from technology forecasting and may forego more significant issues of acceptability and usability in the anticipated futures (Loveridge & Street 2005). It is getting more common to acknowledge that a theoretical and technical approach to foresight does not inspire action that could shape the future (Candy & Potter 2019).

Western worldviews are firmly embedded in the concepts of innovation and progress (Adam & Groves 2007). In Western worldviews, the world is often viewed as objectively knowable. The knowledge of the future can be generalized, and the expert knowledge can be transported and implemented anywhere in the world by engineers, technicians, and other experts (Apffel-Marglin & Marglin 1996, 1). In foresight, ways of knowledge that do not fit within Western notions of progress, development, or science are devalued (Kapoor 2001). Decolonial theory and practice point toward a reality that is uncertain, non-linear, and without guaranteed outcomes or predetermined paths to change (Stein et al. 2020). It can be argued that dividing the time into past, present, and future is also a cultural assumption (Adam & Groves 2007) and that the whole concept of the future may be lacking in some cultures (Inayatullah 1990).

Kapoor (2001) argues that foresight has had little relevance to most of the world's population and encourages foresight practitioners to create visions of the future from non-western perspectives. Only a few people globally can ever participate in foresight co-creation (Ono 2003). In a foresight process, one should consider how the imagined futures might privilege certain worldviews over others (Matters 2019). The decolonization challenge is related to who is permitted to create new knowledge (Schultz et al. 2018). Non-western, non-white, and other perspectives not included in normative thinking are often excluded from futures thinking processes (Matters 2019). It might even be that when people are invited to co-create futures when they come from a colonial past, they may not see themselves as actors in a possible future due to trauma or a feeling of powerlessness (Inayatullah 2018). Bisht (2017) claims that more than inclusive participation is needed to open up foresight processes for non-western worldviews. For the myriad ways our future can manifest, the methods used for foresight need to celebrate the plural knowledge in our world. The whole idea of development as a linear process needs to be deconstructed. (Bisht 2017.) The work of decolonizing existing worldviews is hard and unpleasant, requiring the participants to engage with uncertainties and messiness without clear answers and directions (Stein et al. 2020). However, it is possible to design futures to consider non-Western worldviews, paradigms, and norms (Mazé 2019), questioning the claims of the universality of Western worldviews (Mazé & Wangel 2017).

This project aims at understanding how the tools and processes for foresight co-creation could be more inclusive, support different worldviews, and not reinforce inequalities or dominance. A quote by Verna Myers has circulated recently on the internet: Diversity is being asked to the party, but inclusion is about being invited to dance (Sherbin & Rashid 2017). This

work aims to take a step further and say that true inclusion is about feeling empowered to invite others to dance or take the dancefloor without being asked. How do we take inclusion onto that level in foresight co-creation processes?

In this research, I consider norm-critical, intersectional, and decolonial perspectives to foresight and co-creation. Therefore, I would like to position myself in relation to our society's current normative structures and power hierarchies. I am, in many ways, a person with privilege, being a white, cis-gender woman, born and living in the Global North, and have benefited from colonization. Therefore I acknowledge that I can never fully grasp the struggles of those with less privilege in our current society and do not claim to create solutions that fit people with different identities. This research project explores possible solutions and ideas for more inclusive processes, but individual identities and power structures should be considered each time the suggestions are used.

1.1   Need for Development and Research

This research and development project has been commissioned by a UN entity that works in the field of innovation and is exploring different methodologies to support the work of the UN, incorporating the values of inclusion and diversity. The organization works with big data and AI for development, humanitarian action, and peace. The organization operates through a network of innovation labs globally, aiming to understand how digital data can enhance human well-being, give feedback on policy responses, and support the achievement of the Sustainable Development Goals. The organization brings together governments, UN entities, and partners from academia and the private sector to test, refine and scale methods with the help of multidisciplinary teams of data scientists, engineers, designers, social scientists, communication experts, and data privacy and legal experts.

Recently, the organization has created a new workstream on futures and foresight. The complexity of current challenges like climate change, mass migration, and the COVID19 pandemic have led the organization to need more foresight and futures thinking not to be reactive. The organization is planning several strategic activities in the new program: for example, providing new frameworks, models, and standards, exploring AI tools for foresight, creating foresight services for the wider UN network, and testing and experimenting with different strategies to ultimately benefit the communities they work together with. The need for the research and development project arose organically from the ideation of the new workstream and its' topics – the organization felt that there was a need for piloting different approaches around foresight, diversity, and inclusion. The first project phase was to explore and pilot different approaches during the first phase of the workstream.

Aim of Research and Development

This thesis has a research-oriented development approach (Rantanen & Toikko 2011), including research and development activities. The research aims to create an understanding of barriers to inclusion and supporting elements in foresight co-creation. The development aimed to support the commissioning organization in designing inclusive foresight co-creation processes and creating concrete tools for the purpose.

Research questions

In order to reach the aim of creating a tool for designing inclusive and co-creative foresight processes, the following research questions have guided this work.

Research Question 1: What factors are crucial for inclusive foresight co-creation processes?

Research Question 2: How can a global organization working in different demographic and cultural contexts design inclusive co-creation processes for foresight?

2   Literature Review

The main concepts presented in the literature review are diversity, inclusion, and designing futures. Co-creation is taken as an approach to the designing futures and scenario planning process because co-creation has the potential to support engaging diversity for innovation (Phillips 2014; Torfing & Sorensen 2011; McInerny 2016; Curedale 2018, 405) and inspiring hope and action in a foresight process ((Gudowsky & Peissl 2016; Ono 2003;). A norm-critical and intersectional lens is taken to the concepts of diversity and inclusion because it allows for a more nuanced understanding of how people can be included outside of the traditional diversity management approaches (Van Buren 2015; Christensen 2018; Özbligin & Syed 2015; 342 Lewis & Tatli 2015, 64; Özbilgin & Syed 2015, 342.). A scenario approach is taken to understand the designing of alternative futures because scenarios are very accessible for diverse people and a co-creative foresight method (Slaughter 2004, 103; Alstyne 2010, 73; Lätti, Malho, Rowley and Frilander 2022; Nekkers 2016, 33). Since the commissioning organization operates globally and many of their country contexts have been subject to colonization, decolonial aspects are considered. Also, some co-creative foresight methodologies are benchmarked to understand their potential to support inclusive and co-creative foresight processes. The theoretical background is visualized in Figure 1.
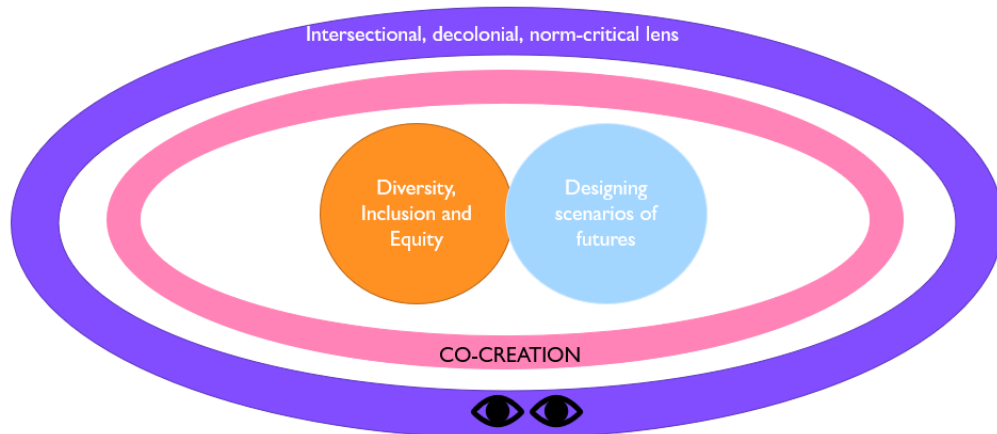
Figure 1. Visualization of the theoretical background.

2.1 Inclusion, Diversity, and Equity

Diversity often refers to how heterogeneous or diverse the organization's members are, including aspects like gender, race, ethnicity, religion, nationality, sexual orientation, professional practice, et cetera, and recognizing differences and similarities between people (Roberson 2006; Tan 2019). Brown (2016, 73) describes diversity as "a variety of backgrounds, styles, perspectives, values, and beliefs" as assets for the organizations.

Inclusion refers to the ongoing effort of integrating diverse people into the organization, ensuring all people can fully participate in all aspects of the organization and that diverse people are valued and respected members (Tan 2019), not only for their abilities but also for their unique qualities and experiences (Brown 2016, 73). Inclusion can also be understood to mean a reduction of inequality in participation or influence for groups of people who have been excluded (Andersen & Andersen 2017). Inclusion can mean the personal feeling of being included: being heard and respected and a sense of belonging (Atcheson 2021; 16-17, Frost & Alidina 2019), or giving space and expression to all voices (Fanshawe 2022, 57). For inclusion to occur, the dominant group in an organization needs to adapt (Frost & Alidina 2019). Currently, it is common to add a third concept to diversity and inclusion: equity (DEI). In equity, it is acknowledged that advantages and barriers exist, and people do not always have the same starting point. Equity means ensuring equal opportunity to all to grow, contribute and develop, despite existing barriers and people's qualities and identities (Tan 2019).

Daya (2014) has researched diversity and inclusion in emerging markets. When the organization strives for visible and invisible diversity, inclusion is created through a systemic transformation at organizational, interpersonal, and personal levels. It results from different strategic processes in the organization (Daya 2014). In the US, diversity and inclusion are often viewed

through the lens of disadvantaged groups in the EU through equal opportunity (Theodora-kopoulos & Budhwar 2015).

Corporate, non-profit, and service sectors all express urgent needs for employees who have capabilities working in diverse organizations (Smith & Schonfeld 2000). Some benefits of diversity for the organization include increased innovation and creativity due to more varied perspectives and greater capability to take on international markets (Roberge & van Dick 2010; Martin 2009). More ethnically and gender diverse companies also gain more financial returns compared to national industry medians in the US; for racial and ethnic diversity, the increase is 35 %, and for gender diversity, 15% (Hunt, Layton & Prince 2015). One study also found an increase of 41% in revenue when transitioning to an office with more than one gender (Ellison & Mullin 2014), and another study showed improved performance for companies with women in leadership (Deszö & Ross 2012). Increased racial diversity leads to better financial performance for banks (Richard 2000). Though, it appears that people in diverse organizations are not necessarily happier than in more homogenous ones; the diversity seems to make the workplace more challenging, even if the performance is improved. People might feel very positive about diversity in the organization, but the reality of a diverse organization may still feel uncomfortable. (Ellison & Mullin 2014.) A study also found that diversity policy-related messaging from a company may make white men feel threatened and that they are mistreated (Dover, Major & Kaiser 2016). There has been little evidence of organizational diversity training and evaluation programs increasing the retention of diverse employees (Kalev, Dobbin & Kelly 2006), so clearly more has to be done in organizations to create an inclusive climate.

It needs to be understood that recruiting people with different identities or representing different minority groups does not automatically bring the benefits of diversity. The company also needs to change to support diversity, which can be tricky. (Ely & Thomas 2020; Sherbin & Rashid 2017.) In other words, for a company to reap the benefits of diversity, they need to be also inclusive (Frost & Alidina 2019, 27; Ferdman, Prime & Riggio 2021). There needs to be active work to dismantle discrimination and subordination, create a culture of equality, and treat differences as a source for learning and innovation (Ely & Thomas 2020; Lorenzo & Reeves 2018). In a large longitudinal study, McKay, Avery, Liao, and Morris (2011) found that inclusion in companies is positively related to customer satisfaction. Inclusive leadership practices can lead to more innovations taken to the market since inclusive leadership behaviors result in 3.5 times more likely for the employees to contribute with their full innovation potential (Hewlett, Marshall & Sherbin 2013). Though, it needs to be noted that there is also research that has found no link between team diversity and team performance (see Horwitz & Horwitz 2007; Gkypali, Filiou & Tsekouras 2017).

In addition to business impacts, inclusion also positively impacts employees: when employees feel included, they are more satisfied with their work and more likely to stay (Bommel, Shaffer, Travis & Foust-Cummings 2021, 118). Inclusive health care organizations exhibit better employee engagement (Downey, van der Werff, Thomas & Plaut 2015). More gender-diverse teams had higher work engagement, but only when their climate was inclusive (Nishii 2013). Travis, Shaffer, and Thorpe-Mosco (2019) found that inclusive leadership behaviors explained 49% of team problem-solving, 35% of work engagement, 20% of intent to stay, and 18% of employee innovation. The younger generations entering the workforce are unwilling to assimilate and hide their differences; instead, they have high expectations for inclusive working climates where diversity is celebrated (Brown 2016).

Some organizational practices that can make the organization actually inclusive are having a solid shared goal and vision, designing spaces and collaboration activities that ensure mixing across diversity in the organization, valuing each person's unique skillsets and experiences, allowing truly equal opportunities in decision-making, and contributing to organizational success and a sense of comfort and self-efficacy for each person (Bernstein, Bulger, Salipante & Weizinger 2020). Also, inclusive leadership, supporting authenticity in the workplace, networking and visibility for minorities, and clear career paths can create a more inclusive organizational culture (Sherbin & Rashid 2017). Baker and Kelan (2015, 93) suggest that diversity should be embedded into organizational structures like recruitment, procurement practices, decision-making, and transforming organizational culture through behavior change initiatives like conflict resolution, unconscious bias training, and the promotion of critical thinking. Johnson and Lambert (2021, 68) propose inclusive leadership behaviors that support the employees' uniqueness and belonging. Uniqueness can be supported, for example, by hiring people who differ from the norm and by having empathy for employees' perspectives. In contrast, belonging can be supported by transparency in D&I activities and ensuring that white men are included in processes as allies (Johnson & Lambert 2021, 68). Wasserman (2021, 93) suggests that for fostering inclusion, boundaries of acceptable behavior should be redefined, differences should be explored through conversation, modeling the value of diversity, and being authentic. Atewologun and Harman (2021, 107) stress that the creation of an inclusive culture is not the responsibility of formal leaders, but all employees should engage in creating the culture. They also emphasize eliminating micro-behaviors that reinforce negative power structures and low status for minorities and women.

Diversity management can be criticized for taking white, heterosexual, western, middle/upper class, abled men as the term of reference and measures how other people differ from this norm, drawing the attention toward the "otherness" of the people who do not conform (Zanoni, Janssens, Benschop & Nkomo 2009). Diversity and inclusion management sometimes takes the approach of colorblindness, i.e., attempting the same treatment to everyone despite their differences, or the approach of multiculturalism, which attempts to celebrate

diversity and see it as an organizational strength. Both approaches tend to fail, colorblindness due to minorities feeling excluded and multiculturalism due to non-minorities resistance. (Stevens, Plaut & Sanchez-Burks 2008). Diversity and inclusion practices can also fail if they sound like programs meant for minorities instead of everyone, in which case they can even create strife between different groups in the organization (Atewologun & Harman 2021, 106). Mainstream diversity and inclusion management have also been criticized for being performative and lacking a nuanced understanding of power relations and how culture, history, and power form raced, sexed, and gendered perceptions of employees, and being oblivious to the situatedness of power and privilege in organizations (Christensen 2018; Christensen, Mahler & Teilmann-Lock 2021). There has also been a current discussion around "deep" and "surface" diversity, in which deep diversity refers to personal traits and values, and surface diversity refers to characteristics like race and gender and viewing the deep diversity characteristics as more important since they tend to have a more significant impact on teamwork. This approach risks overlooking oppression and societal power structures, reducing diversity to benign differences between people. (Kyriakidou 2015, 36.) Atewologun and Harman (2021, 107) argue that true inclusion always requires changing the system and cannot be achieved by integrating or assimilating minorities.

Leadership in organizations needs to recognize that traditional diversity management through formal policies is not enough, and leaders need to understand and redress existing power imbalances due to diversity categories such as gender, race, disability, and others (Lewis & Tatli 2015, 64). Providing employees the same starting line is not enough to create inclusion (Brown 2016, 47). Traditional diversity management has primarily taken a fixed and siloed view of diversity and neglected the fluidity of the diversity categorizations when, for example, operating in different country contexts and has treated, for example, gender as the only significant diversity category (Özbilgin & Syed 2015, 342). It is suggested that using an **intersectional** and **norm-critical approach** can render visible intersecting categories of diversity, simultaneously emphasizing difference and allowing it to be a changing condition (Christensen 2018; Özbligin & Syed 2015; 342 Lewis & Tatli 2015, 64). Diversity and inclusion can only be successful if the norms and privileges of the dominant societal structures are critically reflected (Ponzoni, Ghorashi & van der Raad 2017). Intersectional thinking helps organizations analyze who is advantaged in the organization and who is not, allowing for a more profound understanding of discrimination and fairness. Individual managers may gain from intersectional thinking a clearer picture of which barriers exist for fair treatment and how they may intersect and a tool for analyzing their own possible bias. (Van Buren 2015, 326). In this thesis, diversity refers to diverse experiences, values, qualities, and diversity categories being present; inclusion refers to the norm-critical process of removing barriers and negative power structures that prevent people from realizing their full potential, taking into account the different intersecting identities of people. Inclusion does not simply mean that diverse people

are welcomed or that the atmosphere celebrates and acknowledges diversity, but also that it is understood that the organizations need to change and adapt, in sometimes uncomfortable ways, to relinquish power from those who have it because they assimilate to the dominant societal norms.

2.1.1   Norm-critical approach, Intersectionality, and Related Terms

The norm-critical approach means considering societal norms, the implicit assumptions of what we consider "normal" in each situation (Lundmark, Normark & Räsänen 2011; Christensen et al. 2021). Norms are unwritten societal rules and expectations about behavior, thinking, and acting, and they are based often on gender, ability, age, sexual orientation, and other qualities (Isaksson, Börjesson, Gunn, Andersson & Ehrnberger 2017). A norm can also be defined as a societal convention or standard that guides our behavior, and it can reinforce both positive and negative actions. (Frost & Alidina 2019, 4). In organizations, norms can occur through recruitment practices, in which specific candidates, for example, males, are viewed as ideal to the organization (Nentwich, Baumgärtner, Chowdhury, & Witzig 2021). Norm-critical approach challenges negative norms like binary thinking, closed definitions, and power hierarchies by examining and challenging norms that create social inequality (Christensen et al. 2021; Nilsson & Jahnke 2018). The norm-critical approach means problematizing and criticizing what is seen as normal and permitted, considering who is considered part of "us" and what characteristics are associated with those people or categories like "women" or "immigrants." (Isaksson et al. 2017).

Intersectionality means taking into account the different axis of power like gender, race, class, and sexuality in political and academic discussions, and recently even such diverse fields as organizational studies and geography (Cho, Crenshaw & McCall 2013). Intersectionality explains how intersecting power relations influence social relations and individuals (Hill Collins & Bilge 2020, Atcheson 2021, 79) and how oppression and discrimination reinforce each other (Van Buren 2015, 316). The concept of intersectionality originated among Black feminists in the USA when they felt that feminism was mainly concerned about issues of white women (Weldon 2008, Atcheson 2021, 80). Even if hailing from the US, intersectionality is very well suited to other national contexts when there is a need to understand power and discrimination (Weldon 2008). On the one hand, intersectionality sees everyone as an experiencer of matrixes of oppression and domination (Ramsay 2014), i.e., a person can simultaneously be both privileged and oppressed due to their complex and intersecting identities (Brown 2016, 52).

On the other hand, the concept considers every person deserving of their human rights and worthy. The goal of intersectionality is social justice. (Ramsay 2014.) As an example, an experience of a person can only be understood if it is viewed through their gender and ethnicity

and other elements that may put them at a disadvantage. The concept of intersectionality gives a richer understanding of how a person can relate to their setting and experience injustice than only viewing a person's experience through their gender (Van Buren 2015, 317.) Identities are essential in intersectional thinking, but identities are meaningful only when they are linked to societal power structures (Gardner & McKinzie 2020). Power is important in intersectionality, and intersectional thinking helps analyze and uncover hidden power dynamics. Power and its lack are often why some people experience discrimination. (Van Buren 2015, 320.) Some criticisms regarding intersectionality have been that it is an academic, theoretical practice that lacks testing and organizational implementations of the theories, that in intersectionality, there is too much emphasis on the people who experience discrimination, and that the actions of the powerful are often neglected in discussion (Van Buren 2015, 324). Intersectional thinking has also been criticized for possibly pitting disadvantaged groups against one another. However, it is also possible to use the intersectional lens to understand better how each individual's experience is different from those of social advantage. (Livingston & Rosette 2020, 41.)

Decolonization. Over the past 500 years, European expansion has strongly impacted African, Middle-Eastern, Asian, Oceanian, and North and South American nations and peoples (Von Bismarck 2012). It has resulted in oppression, seizing of national resources, and embedding Western ideologies into society (Khandwala 2018). Decolonization refers to a process in which the past European colonial process is attempted to reverse with all of its' cultural, social, and economic aspects, even if it is vital to acknowledge that historical processes do not move backward (Von Bismarck 2012). The decolonizing project seeks to reimagine power, change, and knowledge through multiple epistemologies and ontologies (Sium, Desai & Ritskes 2012). In decolonization, Eurocentric thinking is subversed and transformed to thinking with and from instead of thinking about (Schultz et al. 2018). Diversity and decoloniality are related but not the same thing – diversity refers to bringing a plurality of worldviews to the table, and decolonization refers to making actual changes in how people think (Khandwala 2018).

Privilege is a common concept in intersectional thinking, allowing for a nuanced understanding of the societal power structures that cause exclusion. Society bestows privilege onto certain groups perceived to fulfill general normative expectations (Case, Iuzzini & Hopkins 2012). Privilege is "a set of unearned benefits given to people who fit into a specific social group" (Atcheson 2021, 49). Understanding the concept of privilege is crucial for building a more just world since privilege tends to be invisible to those who have it, and therefore it means that it is difficult for the privileged to understand the oppression of the non-privileged. Privilege works silently for the benefit of the privileged. (Martins 2014.) Race, gender, sexuality, class, and age are socially constructed categories of difference that allow for exploring privileges (Sparks 2020). Privilege is linked to societal power structures since it maintains the advantages of certain groups and accumulates power for them (Twine & Gardener 2013, 8-10).

Privilege is always relative and situational since each individual has intersecting and different socially constructed identities. Therefore, it is impossible to say that, for example, a male person is always privileged or that a white person is always privileged. (Sparks 2020.) Privilege describes the intersecting inequalities as more than the sum of their parts. Understanding the inequalities that, for example, a black woman faces cannot be understood simply by understanding what inequalities people of color or women face. (Gardner & McKinzie 2020.) For example, privilege is linked to norms since a male person will gain privilege only if he fits the societal norm of masculinity (Atcheson 2021, 51). The Privilege Wheel (Figure 2) visualizes how privilege works, showing privileged positions in the center of the wheel in our current societies and less privileged positions on the outer layers of the wheel (Canadian Council for Refugees 2021.) The Wheel shows some of the different positions and qualities that can render privilege to a person, for example, through economic or societal relations of an individual, in a specific society. The idea is not to judge individuals based on their position on the Wheel but to use it to reflect on one's actions that can increase inequality (Karttunen & Ikäheimo 2021).
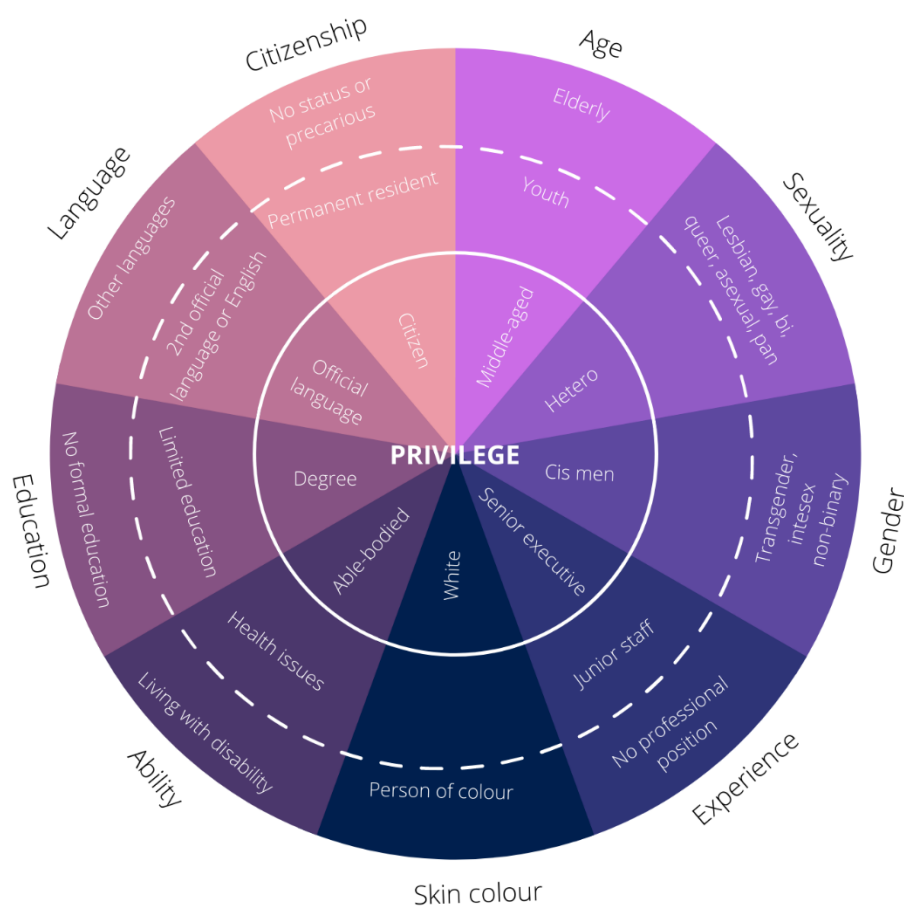

Figure 2. Privilege Wheel (adapted from Canadian Council for Refugees 2021).

Bias means unconscious assumptions about other people. There are positive biases, but often, when inclusion is discussed, negative, unconscious bias is referred (Frost & Alidina 2019, 68). Open discrimination against people is less common in organizations nowadays, but unconscious negative bias still causes marginalization of people. People tend to believe that norms they encounter due to their diversity categories, like gender, are the same for everyone. (Brown 2016, 10). Due to unconscious bias, people behave in ways that marginalize others without being fully conscious of it (Atcheson 2021, 112). There are many biases: for example, affinity bias is the likelihood for preference to bonding with those who are similar to the person, attribution bias refers to the process in which people misevaluate the impact of their behavior, for example, by seeing their successes as their own doing, but failures due to external circumstances (Atcheson 2021, 114-115; Frost & Alidina 2019, 79). For an inclusive organization, managing unconscious bias is essential. Managing bias starts with becoming aware of own bias and consciously mitigating situations where bias might have an impact (Frost & Alidina 2019, 71 -72).

2.2   Design Thinking for the Future

Design can be defined as exploring and proposing something that does not exist yet, at the intersection of immaterial and material, possibility, meaning, and actuality (Folkmann 2016, 3). In current societies, with their emphasis on innovation and change, design is one of the most important areas of cultural production and art, technology, and science. Design aims to transform reality through products, processes, and services. (Otto & Smith 2013, 2-3.) Design produces inventions, something that does not exist today, and explores what is possible, being inherently future-oriented (Liedka & Ogilvie 2011, 7). Design is a "creative, disciplined, and decision-oriented inquiry, carried out in iterative cycles," where the solution to a design problem is developed in an interconnected and interdependent manner, organizing knowledge and solution ideas (Banathy 1996, 19). The solutions searched in the design process exist outside of the current system, and through the design process, the designer transcends the current system (Banathy 1996, 20).

Design Thinking (DT) is currently one of the most ubiquitous approaches to design, adopted by some of the leading innovative brands like Apple and Google and included in leading universities' curriculums (Dam & Siang 2022; Curedale 2018, 67-74). Design Thinking was popularized initially by the design agency IDEO (Buehring & Liedtka 2018). Design Thinking is co-creative, human-centric, and uses an iterative approach and empathy to match the technologically feasible, the designer's methods, and the users' needs (Brown 2008). Design Thinking is a futures-oriented practice because it aims for innovation and has a generative, optimistic stance (Curedale 2018, 108-111). Design Thinking aims for innovation by blending elements from engineering, social sciences, and business, producing innovative products, systems, and services (Meinel & Leifer 2011). Design Thinking can be defined as a systematic approach to problem-

solving, and Design Thinking transforms the idea of design into a practice (Liedtka & Ogilvie 2011, 5-6). Design Thinking advocates for "designing with" instead of "designing for" and bringing in more heterogenous voices than traditionally in design (Buehring & Liedtka 2018). Human-centricity and the centrality of the user's needs are critical in Design Thinking (Liedtka & Ogilvie 2011, 4; Meinel and Leifer 2011; Curedale 2018, 97), differentiating Design Thinking from traditional approaches to design (Curedale 2018, 108). Design Thinking includes tools and processes to follow to reach innovative outcomes (see Curedale 2018; Liedtka & Ogilvie 2011; Meinel and Leifer 2011).

Often, the DT process includes five stages: Understanding the problem, the user's needs, ideating, prototyping, and testing (Meinel & Leifer 2011), but the process has different variations (Engholm 2020), including the process by Liedtka and Ogilvie (2011), which calls the stages What is, What if, What wows and What works, and the IDEO model by Tim Brown (2008), which includes the stages Inspiration, Ideation and Implementation. Tools that allow for participatory approaches are mostly included in the process (see Liedtka & Ogilvie 2011; Curedale 2018). The designer's role is to be a listener and process facilitator for the co-creation in the DT process (Curedale 2018, 98).

Design as an approach has been criticized for taking a privileged perspective and not highlighting the experiences of less privileged groups (Martins 2014). Design can be seen to perpetuate and reinforce social norms (Wikberg & Nilsson 2018). Designers may have earnest intentions of creating truly participatory and equal processes, but they often lack an understanding of power structures, social norms, and privileges that create inequality (Goodwill, van der Bijl-Brouwer & Bendor 2020).

Caroline Criado Perez (2019) gives examples of how the male gender has been seen as the norm in design, resulting in uncomfortable and sometimes dangerous everyday experiences, ranging from queueing for toilets in the theater to having a 47% bigger risk of dying in a car accident for half of the global population. Examples like the previous one show an unconscious process in which designers unwittingly reinforce social norms through design without realizing something problematic may be taking place (Wikberg & Jahnke 2018). Design can also reinforce stereotypical thinking about genders by creating products that portray certain qualities as belonging to the male or female gender or designing spaces that reinforce the able-bodied norm (Wikberg & Jahnke 2018).

Design can have a definite role in counteracting oppression if intersectional perspectives are implemented (Martins 2014). The norm-critical approach allows imagining possibilities outside the conventional and normative solutions in everyday life (Isaksson et al. 2017). Especially privilege is a concept that has received little attention in participatory design (Goodwill et al. 2021). If designers are unaware of current social norms, they risk designing objects and

experiences that only benefit those within the norms, leaving out those outside the norms (Wikberg & Jahnke 2017). In the context of innovation, inclusion often means increasing the idea of which societal actors are capable of innovation; for example, EU policies also see SMEs and the service economy as potential sources for innovation, in addition to the traditional industrial and technological organizations (Lindberg, Forsberg & Karlberg 2015). Lindberg, Forsberg, and Karlberg (2015) propose that the concept of inclusive innovation should be widened from traditional technological and industrial ones to mean innovation that is developed together with marginalized and underrepresented groups. If designers become more aware of concepts like privilege and norms, including their own possible privileges, they may become better at designing to challenge the status quo and negative power structures (Goodwill et al. 2021).

Design Thinking, being a ubiquitous approach, has also been criticized. Tunstall (2013) criticizes the design field for framing Design Thinking as a "progressive narrative of global salvation" that can exclude alternative, non-western ways of thinking. Gaines (2019) argues that Design Thinking does not allow for finding the root causes of societal issues since it does not acknowledge the necessity of struggle to solve them. Design Thinking can also be criticized for privileging the designer or a small group of designers, the designer becoming a gatekeeper for the meanings that can enter the design process, and lifting the designer above biased thinking and political agendas (Iskander 2018). Design Thinking tends to be results-oriented, whereas the norm-critical approach is process-oriented (Christensen et al. 2021). Design Thinking should become aware of how the designer's identity and political position can affect the design process, allowing for "interpretative engagement" where the participants can re-evaluate their understandings of themselves and the changing world (Iskender 2018). Design Thinking can be combined with a norm-critical approach, as Christensen et al. (2021) have proposed. Since design thinking as a method tends to be fast-paced and emphasizes doing over thinking and reflection, and even if it is co-creative, it will still emphasize the normative positions of each co-creation participant. When design thinking is combined with a norm-critical approach, both approaches benefit and ensure that a problem is viewed from multiple angles. The solutions produced in this way will benefit multiple different experiences and groups of people. When design thinking and the norm-critical approach are combined, the norm-critical approach introduces certain friction to the agile process of design thinking and forces the participants to reflect on themselves and their positions of power and privilege. (Christensen et al. 2021.)

Wikberg and Jahnke (2017) have created a norm-critical design process that they call norm-creative innovation. The norm-creative innovation does not aim to create neutral solutions but to place diverse user experiences at the core of the design process. The designer must first appropriate the norm-critical approach and understand current social norms, values, beliefs, and attitudes and how they contribute to inequality. After that, the designer becomes

norm-creative, creating new solutions that counteract social norms and are socially sustaina-
ble: valuable and desirable. The method includes a set of norm-creative tactics that can be
used in the design process to offer a lens for creating solutions. The tactics, illustrated in Ta-
ble 1, guide the solution towards taking into account marginalized or excluded perspectives
by challenging, opposing, or correcting existing norms.

Tactic	Objectives
The Hole Punch	Addresses social norms of exclusion by influencing public opinion and increasing awareness through communication/storytelling of negative user experiences.
The Sledgehammer	Opposes social norms of exclusion by performing user experiences of marginalization, exclusion, or discrimination.
The Plastering Tro-wel	Counteracts social norms of exclusion by creating solutions that fit and work for as many user groups' needs and preferences as possi-ble.
The Precision Screwdriver	Corrects social norms of exclusion by addressing the specific needs of marginalized groups through the design outcome.
The Twirl Whisk	Thwarts social norms of exclusion by tweaking the problematic is-sue into a new form or function.
The Camouflage Net	Outsmarts social norms of exclusion by packaging the new in famil-iar and recognizable ways.
The Adjustable Wrench	Neutralizes social norms of exclusion by creating flexible solutions that can be expanded, transformed, or otherwise reconfigured by the users themselves.
The Welding Torch	Annuls social norms of exclusion by creating collective and shared systems or service solutions.

The Lever Bar	Challenges social norms of exclusion by building on affirmative actions and reversed privileges for marginalized groups.
The Eraser	Counteracts social norms of exclusion by obliterating "bad designs" and starting from scratch.
The Grater	Works against social norms of exclusion by creating objects that challenge exclusion through their form and/or function.
The Garden Trowel	Opposes social norms of exclusion by creating solutions that transcend norms and categorizations.

Table 1. Tactics for norm-creative innovation (Wikberg & Jahnke 2017).

It is acknowledged that people affected by a design should be able to influence the design through co-creation (Mattelmäki & Sleeswijk Visser 2011). In our current world, we need to solve complex problems that individuals or traditional management approaches cannot solve; therefore, we need both inclusion and co-creation (Wasserman 2021, 92). In this thesis, co-creation is chosen as an approach to engaging diverse stakeholders in designing futures.

2.3   Co-creation as an Approach

Co-creation can result in different types of value. Co-creation can bring monetary and use experience value for companies through more desirable services for users and social value related to a more humanistic view of a better life for people (Torfing, Sørensen & Røiseland 2016). Co-creation can benefit the design process, the users, the organization, and even society (Steen, Manschot & De Koning 2011; Torfing et al. 2016).

Co-creation has many benefits for the organization: improved creativity and improved innovation processes, improved collaboration between different actors in the organization, a more profound understanding of users' needs, and more successful innovations (Steen et al. 2011). Co-creation can improve ideation processes, service and product development, decision-making, collaboration, creativity, and the user or customer satisfaction over time (Steen et al. 2011). For society, co-creation brings value in creating more sustainable ways of living and finding solutions to the challenges humanity faces (Ali & Liem 2015, Mazzucato 2018), enhancing both democracy and effective solutions to societal problems (Torfing et al. 2016). Sanders and Simons (2009) combine the three types of benefits of co-creation for businesses,

users, and society in Table 2. They see potential in co-creation for changing mindsets, how people are perceived in the process, and creating more long-term solutions. For them, co-creation as an approach can bring three different types of value: monetary, related to user experience, and societal, and therefore show potential for different types of actors with different goals. Both businesses that are merely concerned about shareholder value and organizations that consider, for example, democratic participation and improving society can find value in co-creation. (Sanders & Simons 2009.)

Co-creation of value	Objectives	Mindset	How people are seen	Deliverables	Timeframe
Monetary	Production, consumption, maximization of shareholder wealth	Business, commercial, economic	Customers, consumers	Marketplace results, business advancement, Products that sell	Short-term
Use/Experience	Positive experiences, personalization, customization	Experience-driven, service-orientation	End-users, empowered consumers	Products and services that people need and want	From life-stage to life time, long-term
Societal	Improve the quality of life, sustainability	Human-centered, ecological	Partners, participants, owners	Transformation, ownership, learning, behaviour change, ownership, survival	Over many generations, longer term

Table 2. Three types of value of co-creation (Sanders & Simons 2009).

2.3.1 Co-Creation of Value

Co-creation is a process in which the company invites the customers into an interaction process. The customers co-construct their user experience and create unique value together with the company (Prahalad & Ramaswamy 2003) in a dyadic process in which the customers take different roles in influencing the created value (Aarikka & Jaakkola 2012). Value co-creation

with customers is an emerging new paradigm for the economy that will free the businesses from the old product-centric way of value extraction (Prahalad & Ramaswamy 2004). The old paradigm is called goods-dominant logic (G-D logic). In G-D logic, value derives from outputs of units, and the customers are viewed as resources to be acted on. Value is added to the goods in the production process (Vargo & Lusch 2007) and assumed to be embedded in the product (Ballantyne, Aitken & Williams 2011). In the product-centric paradigm, businesses see the customers as external means for value extraction, trying to please the customer with new offerings in the external-to-firm market (Prahalad & Ramaswamy 2004).

In the new customer-centric paradigm, enabled by global digitalization and access to information, the customers have become active agents in finding experiences and value that pleases them (Prahalad & Ramaswamy 2004). Customers are becoming more empowered and no longer dependent on one-sided communication from companies. For the companies to gain a competitive advantage in the new situation, they need to embrace co-creation with the customers, and the roles of companies and customers will need to converge in joint value co-creation. (Prahalad & Ramaswamy 2004.) This concept can be referred to as the Service-Dominant logic (S-D logic), in which the process of providing benefit becomes more central than the output units. In S-D logic, the customer is a collaborator of the company and capable of acting on resources, and the customer and company co-create value together (Vargo & Lusch 2006; Aitken, Ballantyne, Osborne & Williams 2006; Payne, Storbacka & Frow 2007). In S-D logic, also external environments can be actively modified by the company instead of being uncontrollable externalities (Vargo & Lusch 2006). Value is created in the use of the service/product (Lusch, Vargo & O'Brien 2007). Recently, the emphasis has been on value creation as emerging from the complex relationships and interactions between the suppliers, customers, and the company, not only through the use of the service or product (Grönroos 2008; Grönroos 2011, Ballantyne & Varey 2006, Ballantyne et al. 2011). The idea of joint value co-creation can be taken even further as Customer-Dominant logic (C-D logic) (Voima, Heinonen & Strandvik 2010). In the C-D logic, value creation occurs in the customer's context and life, in a relational and situational manner, and it is always shared and collective within the customer's networks (Voima et al. 2010). The customer becomes even more central to the value creation process than in S-D logic, which can be argued to be still producer-centric (Heinonen et al. 2010). The C-D logic suggests that understanding the customer's goals and what they do with the services is central to the creation of value (Heinonen et al. 2010). The value creation process is ongoing, and the customer's role and ability to extract value are emphasized (Grönroos & Voima 2012).

Essential elements in value co-creation are dialogue, access, risk benefits analysis, and transparency (Prahalad & Ramaswamy 2004). The concept of joint value co-creation and viewing services as the primary form of economic exchange is a change in the predominant economic paradigm of the previous 200 years (Ballantyne et al. 2011). In the paradigm, experiences

become central to the economy instead of goods and products (Prahalad & Ramaswamy 2004), and services are the common denominator of all exchange (Payne et al. 2008). Vargo and Lusch (2004) claim that goods are actually services, and goods serve through their role as service appliances. This means that companies need to transition from designing relevant products to co-creating experiences with the customers (Payne et al. 2008). In the new economy, services and social systems of people are linked together to interact for shared results and goals (Meroni, Sangiorgi & Cooper 2011). Companies need to be part of the consumer communities and interact with them directly, co-shaping experiences and expectations with their customers, learning together in dialogue (Prahalad & Ramaswamy 2004; Ballantyne 2004).

2.3.2   Co-Creation as a Concept in Innovation and Design

Co-design refers to activities in which different stakeholders are invited into innovation and development processes to bring their experiences into the design process and create a closer relationship with the end-users (Trischler, Dietrich & Rundle-Thiele 2019). Co-design and co-creation are often used synonymously and interchangeably (Sanders & Stappers 2008, 6). Co-design is a cooperative, creative activity taking place during the entire co-creation process (Ali & Liem 2015), but not when the solution is already in use (Chydenius 2020; Sanders & Simons 2009). The experienced value of the solution to the user can be influenced by co-design and continue after the use, as illustrated in Figure 3 (Chydenius 2020). Even if co-creation and co-design are not synonyms, it is currently common for non-academic designers and facilitators to use co-creation in the meaning of co-design (see Stickdorn & Schneider 2011, 198; The Interaction Design Foundation 2022; Design Council 2022). Because of this, in this thesis, co-creation is mainly used to describe both co-creation and co-design.
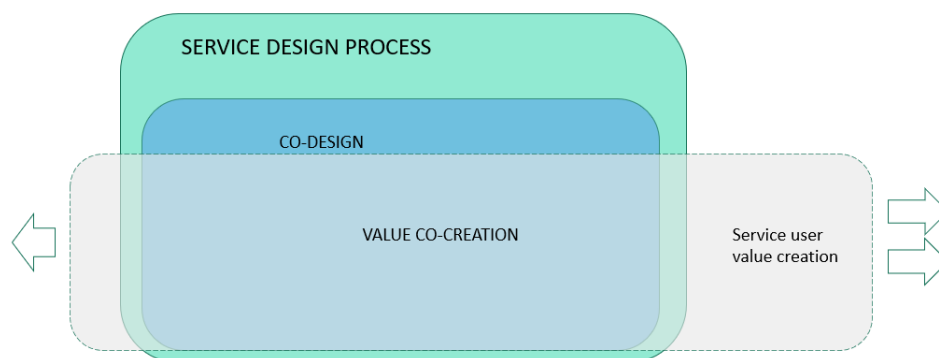

Figure 3. Value creation and co-design in the service design process (Adapted from Chydenius 2020).

Similar concepts were called participatory design before the terms co-creation and co-design emerged. The participatory design approach emerged in the 1970s in Northern European countries. (Sanders & Stappers 2008) Participatory design has strong connotations of supporting democratic citizen involvement and community innovation (Ehn 2008). Within the participatory design paradigm, the role of users in the design process has become more of a co-designer, actively shaping the outcomes of the process (Mattelmäki, Sleeswik Visser 2011). In participatory design, the active citizens move toward the researchers and designers to collaborate to find solutions (Steen 2013). Currently, co-creation and co-design are more commonly used to describe these processes instead of participatory design (Sanders & Stappers 2008), possibly due to a more complex understanding of the meaning and significance of these approaches in our current world, illustrated in the chapters before. Another tradition that influences co-creation is user-centric design, which emerged in the 1970s. In user-centric design, the user is essential but still has a passive role in the design process as an object of study to the designer, performing given tasks or being interviewed by the designer, giving opinions about the products or services in development (Sanders & Stappers 2008).

For some theorists, co-creation means a process in which experts and end-users collaborate in a design process. Cottam and Leadbeater (2008) envision co-creation as a process that enables co-designed services through distributed resources and engaging end-users in a vital role in developing effective solutions together with experts. Sanders and Stappers (2008) define co-creation as a collective activity where creativity is present, at least two people participate, and lasting the whole design process. For them, co-design means when designers and people without design education collaborate in a design process. On the other hand, co-creation can also be defined more through the idea of collaboration of diverse people. Especially in the public sector, co-creation can be defined as how different actors solve a challenge by exchanging knowledge, resources, and ideas, while understanding the task at hand develops and changes (Torfing et al. 2016), as well as a process focusing on problems and creating new value outcomes (Ansell & Torfing 2021). Steen (2013) defines co-design as a process of "joint inquiry and imagination," in which diverse people collaborate to explore a problem and develop solutions. Nahi (2018, 63), who has studied co-creation in inclusive business relationships in developing countries, defines co-creation "as an enduring and iterative interaction, in which diverse actors integrate their knowledge and capabilities to generate novel solutions that none of them could have imagined or created on their own." Puerari et al. (2018) see co-creation as working together towards a common goal or learning together by creating knowledge. In this thesis, the co-creation definition is mainly inspired by Nahi (2018, 63), Puerari et al. (2018), and Steen (2013). In this thesis, co-creation is defined as a process in which diverse people collaborate to create new solutions, networks, and knowledge they could not have created independently.

Co-creation is often viewed through positive connotations, as demonstrated by the previous literature. Some common criticisms regarding co-creation are that it can become a tokenistic gesture about participation and inclusion and enhance the participation of the most advantaged and resourceful groups of people (Torfing et al. 2016). A negative phenomenon related to co-creation is so-called co-destruction, in which a service system behaves in a negative manner and misuses resources, concretely, for example, through rude employee behavior or technical failure, destroying value (Plé & Cacères 2010; Zhang, Lu, Torres & Chen 2018). Even if most current design approaches are user-centric and encourage understanding of the user's experience (Isaksson et al. 2017), it can be challenging to include all stakeholders in the process as equal partners and share power with the users (Bratteteig & Wagner 2014). Co-creative design processes often have a narrow view of the purpose of the co-creation, aiming at better functionality instead of aiming toward social change through the outcomes of the design process (Isaksson et al. 2017).

In conclusion, co-creation of value and co-design are potent processes that change how we see the world and operate in it; the joint value creation has changed how we see the economy and what is the locus of economic exchange, co-creation and co-design has changed how we view the role of users of designed solutions and even organizations and how they impact change in the world. The role of organizations and their stakeholders has changed significantly through the idea of co-creation and the role of design in fulfilling the needs of people instead of producing suitable products for people to use (Meroni, Sangiorgi & Cooper 2011). Inclusive co-creation can take the process of designing futures to a level where diverse users' needs can be used as the basis of the design process and consider intersectional and norm-critical approaches.

2.3.3 Facilitating Inclusive Co-creation

In a co-creation process, the diversity of participants is paramount (Torfing & Sorensen 2011; McInerny 2016; Curedale 2018, 405). People who differ in aspects like race, gender, etc., bring different experiences and knowledge to solving a problem (Phillips 2014). If all participants have the same background, perspective, and opinion, the design process results are limited and even predictable (Torfing & Sorensen 2011). Diversity has been proven to increase innovation capabilities in organizations (Lorenzo, Voigt, Tsunaka, Krentz & Abouzahr 2018; Nathan & Lee 2013; Hewlett, Marshall & Sherbin 2013; Phillips 2014, Bassett-Jones 2005). Having a team member representing the end user's identity can enhance understanding of the end-users needs for all the design team (Hewlett et al. 2013).

Central to the co-creation process is the concept of creativity for all people (Sanders & Simons 2009). According to Torfing et al. (2016), there are some prerequisites to co-creation for social value: A belief that all people are creative, the problem to solve is defined jointly,

involving a wide range of stakeholders in continuous dialogue with workshops, using tools and methods that put all involved actors on common ground, focusing on experiences instead of only products and services, and focusing on the whole user-experience. When it comes to design teams and co-creation, a study by Trischler, Kristensson, and Scott (2018) shows that a diverse design team will create more innovative and original results, but only if the facilitation of the team is skilled and supports team bonding in a way that allows the team to benefit from the different viewpoints and experiences. Frost and Alidina (2019, 25) argue that in the short term, more homogenous teams outperform diverse teams since they have a shared language and trust, but that inclusive approaches will, in the end, help the diverse teams leverage even better in the long run. Bresman & Edmondson (2022) have discovered in their research on diverse team performance that psychological safety in the team is the defining factor for team performance: if psychological safety is missing, diverse teams underperform more homogenous ones.

Nahi identifies a few facilitation practices that can foster co-creation, especially in developing country contexts: building common social identities, believing in each other's knowledge, and situational engagement (Nahi 2018). Russo-Spena and Mele (2012) create a practice-based framework for co-creation. The framework includes six phases: ideation, evaluation, design, test, and launch, and each phase includes complex interactions among resources, actors, and actions. Co-creation and design processes intersect in different ways depending on the value sought in the process. If the value is defined as social, i.e., a value that improves people's lives, the value creation should start at the beginning of the process, before any concept definition or exploration. In participatory design approaches, co-creation can take place both when ideas for solutions are created and when decisions are made. (Torfing et al. 2016.)

Often, in a co-creation process, a designer facilitates bringing in the stakeholders and giving them the tools to participate in the design process (Ali & Liem 2015). The designer's role is to navigate the complex process of designing and interacting with the complex dynamics of the real world (Meroni et al. 2011). The facilitation of a co-creation process means systematically guiding a process of creativity and envisioning, providing the user with tools to actively participate in the design process, idea and concept development, and offer their experience (Sanders & Stappers 2008).

The co-creation facilitator guides the group toward an outcome and helps the co-creation participants reach the goals important to them (Jones 2021, 3). It is essential to differentiate between content and process, and the facilitator takes care of the process – methods, interactions, relationships, tools, rules, group dynamics, and atmosphere (Bens 2018,2). When facilitating co-creation, the facilitator assumes a neutral position toward the issue and does not suggest solutions and decisions (Sipponen-Damonte 2020, 33-35; Kantojärvi 2012, 38; Bens 2018, 1). However, a recently emerged concept in group facilitation is called omni-partiality

or multi-partiality, which refers to the facilitator advocating for everyone's needs and actively advising the group against making decisions that may not consider certain people (Kashtan 2020, 47). This approach may be a more effective facilitation practice for inclusion since that helps the facilitator consciously be on the side of the possibly marginalized.

Some core principles of facilitation include empathy, enhancing mutual trust, staying focused, taking part with free and informed choice, shared decision-making, responsibility, and commitment (Jones 2012, 11-12). The facilitator should be transparent in their actions, encourage discussion, guide the co-creation by clarification and help the group make decisions. The facilitator designs a flexible process, uses suitable methods to activate all participants, takes care of the focus and energy level of the group, documents the outcomes of the co-creation, instructs clearly, and designs a process that leads to desired outcomes in the allocated time frame. (Kantojärvi 2012, 40.) Listening and guiding the group through questions is a fundamental skill for a facilitator and the skill of conflict resolution (Jones 2021, 51, 77). An often suggested practice for creating psychological safety in the group is co-creating rules for behavior during the workshop with the participants (Bens 2018, 97; Jones 2021, 23-27).

Much research has been conducted about co-creation processes aiming to increase diversity, inclusion, and equity in organizations. Herrera, Leader, Patel, and Behrouzi (2021) describe a series of workshops intending to recognize and combat oppression within higher education, Espinosa de los Monteros and Enimil (2020) write about designing a DEI strategy with library staff, Hoyt, Housten, Harris, and Millsap (2021) use Open Space Technology for DEI workshops, Stallings, Iyer, and Hernandez (2018) describe co-creation in advancing diversity and inclusion in academia. Less has been written about making any co-creation process diverse, inclusive, and equitable, which is the topic of this thesis. A couple of examples include frameworks by Goodwill et al. (2020) and Wikberg & Jahnke (2017) and the writing of Kashtan (2020) around power in a co-creation process. Also, some methodologies related to intercultural, multicultural, and social justice education from Adams, Bell, and Griffin (2007), Hogan (2007), and Berardo and Deardorff (2012) can be applied to facilitating co-creation inclusively.

Power differences and dynamics are always present in a co-creation process (Kashtan 2020, 226). Often, the theme of power difference is somewhat overlooked in facilitation literature, even if it acknowledges that facilitation practice could lead to flatter hierarchies and leadership styles that emphasize servant leadership and self-organizing teams (Sipponen-Damonte 2020, 14; Bens 2020). The power difference is often considered by stating that the participants should be involved as equals regardless of their status or personal qualities (Jones 2021,12, Sipponen-Damonte 2020, 14; Bens 2018, 3). Sometimes using methods that support equal participation is recommended (Sipponen- Damonte 2020, 30), or managing the participation of high-ranking individuals by clarifying to them that decisions are made as equals

(Bens 2018, 96). Kashtan (2020, 236) has a more nuanced understanding of power in the facilitation process, proposing that equality does not occur in a facilitated process simply by stating that everyone is equal since the participants will inevitably bring with them privilege and power from the outside. Kashtan (2020, 228, 244) talks about three types of power: social, structural, and relational. Structural power arises in a particular context (for example, boss and employee), social power is related to a more rigid social norm like gender or race, and relational power appears in a relationship due to complex reasons like the capability of making things happen to traits considered desirable like good looks (Kashtan 2020, 228, 244). According to Kashtan (2020, 228), the people with less power are less likely to advocate for their needs, and therefore the facilitator of a process should be aware of these dynamics, especially since people with high social rarely are aware of their power. Kashtan (2020, 245-247) suggests that facilitators take power dynamics into account by amplifying the participants' voices with less power, asking their opinions directly, and dividing people into small groups for conversations so that it is possibly hard to stay quiet. Other strategies include lowering the threshold to dissent by, for example, stressing the importance of the opinions of those with less power and asking people to criticize proposals openly (Kashtan 2020, 245-247).

Another aspect of power in a facilitation process is the power of the facilitator. Kashtan (2020, 248) connects this with the multi-partiality, i.e., attempting to support the co-creation participants' needs in the best possible way, and stresses the importance of the facilitator becoming aware of their power, especially concerning possible privilege they may have in relation to the participants. The co-creation participants also often bestow power on the facilitator since they are often external to the process and a person in authority. The facilitator should work with the power dynamic by being transparent about decisions regarding the process so that the participants can influence the process. (Kashtan 2020, 252-254.) Goodwill et al. (2021) have created a framework that allows designers and facilitators to subtly reflect on issues related to power and privilege in the planning phase of the co-creation. The framework aims to enhance the designer's awareness of different forms of power and how power dynamics differentiate actors, thereby creating more just and equitable design processes. In the framework, five different types of power for a designer are identified: Privilege, Access power, Goal Power, Rule Power, and Role Power. Privilege is related to the power to influence the process that the designer or facilitator gains through their identity and social position. Access Power is related to who is included and who is excluded from a process. Goal Power is related to the ability to influence the definition of the goals of a process. Role Power refers to the power to define which kind of roles actors take in a co-creation process. Rule Power means the capability to set both hidden and explicit rules and norms for behavior and collaboration in the process. (Goodwill 2020.)

Adams, Bell, and Griffin (2007, 89 - 113) have written about facilitating social justice educa-
tion classes. They have identified facilitation practices that support the education about so-
cial justice. Their facilitation practices take into account inclusive and norm-critical stances.
They identified practices include creating Participation Guidelines for psychological safety,
attending to personal comfort through check-ins and regular breaks, setting the right tone for
the session with enough of both fun and seriousness, making sure the space is accessible to all
participants, and differentiating between comfort and safety, i.e., making it clear that there
might be uncomfortable topics to discuss but that authentically sharing emotions and
thoughts is always safe.

Berardo and Deardorff (2012, 14) list competencies for intercultural facilitation. The facilita-
tor's communication skills include being able to communicate clearly also to non-native
speakers, paraphrasing indirect statements to direct ones, avoiding ethnocentric slang and id-
ioms, being careful with the use of humor to be culturally appropriate, displaying cultural hu-
mility, and being culturally self-aware, understanding the role of facilitation in the host cul-
ture, suspending judgment over cultural norms, and recognizing ethnocentrism in goals, con-
tent, and process. The role of the facilitator is to suggest alternative perspectives, provide
frameworks for issues emerging in the co-creation, and plan the co-creation methods so that
they are accessible to different cultural filters, for example, nationality, gender, and race.
(Berardo & Deardorff 2012, 15, 17,18.)

Hogan (2007, 26 -30) discusses facilitating multicultural groups and has created a checklist
for diversity workshop design. The elements that should be checked for diversity include dif-
ferent aspects of the workshop, from practicalities to facilitation, workshop content, and ma-
terials. Practical elements like the accessibility of the workshop location, checking workshop
dates against religious calendars, checking if some participants need financial sponsoring to
attend, and checking if the visuals in the workshop include people from different ethnic back-
grounds. The facilitator should consider the diversity of the participants in the planning phase
by thinking about if the invited people represent the right stakeholder groups, not only the
ones that have formal power, and check the gender and minority group representation. The
facilitator should plan for different language abilities and talk in simple terms, avoid compli-
cated or culturally inappropriate humor and explain used terms, and ask participants to cre-
ate cultural understanding about frameworks and concepts that may be new to them. The fa-
cilitator should start the workshop by co-creating ground rules with participants, and during
the workshop, encourage active listening, use their diverse backgrounds as strengths, and use
techniques that help think from another's perspective and use the participants' stories as a
basis of discussion. The facilitator should check activities for cultural suitability, such as
touching or challenging a person in a leadership position, and check that they do not include
stereotyping or reinforcing bias. The facilitator should let go of their expert or power role and
acknowledge the diversity of the participants. At the end of the workshop, the participants

should get the workshop materials in an understandable form, for example, on tapes for illiterate people. (Hogan 2007, 26-30.)

2.3.4   Co-Creating Inclusive Futures

The future can be viewed as a design problem – the designers can never fully control the circumstances under which the designed solutions will be used (Reeves, Golden & Dingwall 2019). Both design and foresight are future-oriented practices concerned with the most efficient activities to reach desired outcomes for organizations (Buehring & Liedtka 2018; Hines & Zindato 2016; Shamiyeh 2010, 10). The concept of futures and temporality has recently entered the design discourse (Mazé 2019). The terms foresight, futures studies, and futures can be used interchangeably, but foresight is often understood as planning future scenarios or a tool for strategic management (Sardar 2010). Foresight, or the study of alternative futures, does not predict what will happen in the future but instead suggests what is possible to happen (Sardar 2010; Dator 2002); in other words, foresight is not a prediction of the future (Murgatroyd 2015, 10). Foresight shows how different activities shape futures, and different assumptions create different future outcomes (Meristö & Laitinen 2021). Foresight can be used when explicitly mapping and influencing the future concretely (Ojasalo, Koskelo & Nousiainen 2015). The foresight process often involves researching current trends, considering different potentialities, developing possible futures, and thinking about which of the futures is preferred (Murgatroyd 2015, 11),

The benefits of foresight include aiding the decision-makers in being proactive and paying attention to new emerging actors in the field (Meristö & Laitinen 2021). It helps the organization manage change, manage uncertainty, and improve strategy implementation and decision-making (Lustig 2017, 23-24). Foresight helps organizations recognize the points in time when action is needed (Schreiber 2019, 3). Through foresight, organizations can attempt to influence the future and prepare for changes in their operational environment (Hiltunen 2013, 161). Foresight practices can result in increased collaboration, reallocation of resources, and even flattening hierarchies to help the organization's flexibility (Schreiber 2019, 3). Using tools that allow for anticipation and co-creation is crucial when managing innovation processes (Gudowsky & Peissl 2016) since foresight methodologies can help create shared visions between diverse stakeholders, assist in developing networks, and understand trends and future developments (Cagnin, Johnston & Giesecke 2015).

Participatory foresight approaches bring co-creative concepts into foresight (Aalto, Heikkilä, Keski-Pukkila, Mäki & Pöllänen 2022, 16). Recently, foresight processes have developed towards a participatory approach to create a more varied picture of possible futures (Nikolova 2014; Ramos, Mansfield & Priday 2012) and take longer-term perspectives into account (Gudowsky & Peissl 2016). Participatory foresight creates future scenarios that can be nearer

to people's everyday lives (Rosa, Gudowsky & Warnke 2018). Governmental organizations and the EU have seen participatory foresight as a tool that can assist in solving significant societal issues that are highly interrelated, transcend boundaries of organizations and disciplines, such as climate change, aging society, or food security (Gudowsky & Peissl 2016), and allow for broader participation in decision making (Cagnin et al. 2015). Co-creative approaches in the future allow the participants to see that the future is not predetermined but that there are alternative futures, some preferable and some not. Thus, inspiring optimism and empowerment in creating the preferred futures. (Ono 2003.)

There are plenty of methods that can be used for foresight, including Backasting, Delphi-process, Trend analysis, Causal Layered Analysis, Future Workshop, Roadmaps, and many others (see Aalto et al. 2022; van der Duin 2016, Hiltunen 2013). In this thesis, the tool scenarios are mainly considered since they allow for a co-creative and participatory approach and dialogue and actively shape preferred futures. Scenarios are easy to use, flexible and accessible to people from different backgrounds. (Lätti, Malho, Rowley & Frilander 2022; 313-315; Alstyne 2010; Slaughter 2004, 103.)

Both design and foresight fields share the scenarios (Hines & Zindato 2016). Scenarios are one of the most widely used foresight tools, and it is very accessible to people from different backgrounds; even children have created future scenarios (Slaughter 2004, 103; Alstyne 2010, 73). Alstyne (2010, 83) argues that Design Thinking (introduced in Chapter 2) and a participatory scenario process are similar, sharing traits and skills. Scenarios are images and stories of alternative futures, which are not predictions or represent the likelihood of change; instead, they represent what is possible from the emerging signals of change and what the future could look like (Alstyne 2010, 71; Nekkers 2016,11). Scenarios are not visions: a vision depicts an aspired future, nor are they future predictions (Hiltunen 2013, 115). Scenarios can be divided into exploratory and normative. Exploratory scenarios depict how trends will lead to probable futures, and normative scenarios have a goal that leads to the present moment (Hiltunen 2013, 116; Aalto et al. 2022,13). Scenarios help people imagine different futures and help decide how to act today, and they provide a systematic tool for analyzing the future and building futures stories (Lätti et al. 2022, 313-315). Scenarios can also prepare organizations for dangerous future and risky events in the future and inspire action and discussion (Hiltunen 2013, 124). Scenarios can provide new, surprising insights about the future and even help transcend dominant organizational cultures (Nekkers 2016, 12). Scenarios are most often created in a dialogic, participatory manner (Nekkers 2016, 33; Alstyne 2010, 71). They are a highly creative, interaction-based, and qualitative method (Alstyne 2010, 71), and they can combine both rational and emotional aspects (Alstyne 2010, 78). Scenarios as a tool have been criticized for treating the current moment as something that simply is and not emphasizing critical awareness of current societal structures. Therefore, scenarios can reinforce existing power structures with their inequalities. (Slaughter 2004, 103.)

Scenarios can be depicted as nested futures – ranging from the ones we think of as possible to preposterous, which would never occur. In between those two extremities lie plausible and probable futures, i.e., futures we think could or will happen. Also, certain futures are preferred, meaning they are the ones we'd most like to see taking place. (Voros 2017.) The Futures Cone by Voros (2017) in Figure 4 shows how the different potential futures are cascading from the present moment. The most likely future is inside the cone and on the external layers to more unlikely futures, and the further the future is from the present moment, the less certain the futures are. The Futures Cone also depicts the preferred futures, where the futures align with the future designers' values and wishes. (Voros 2017.)
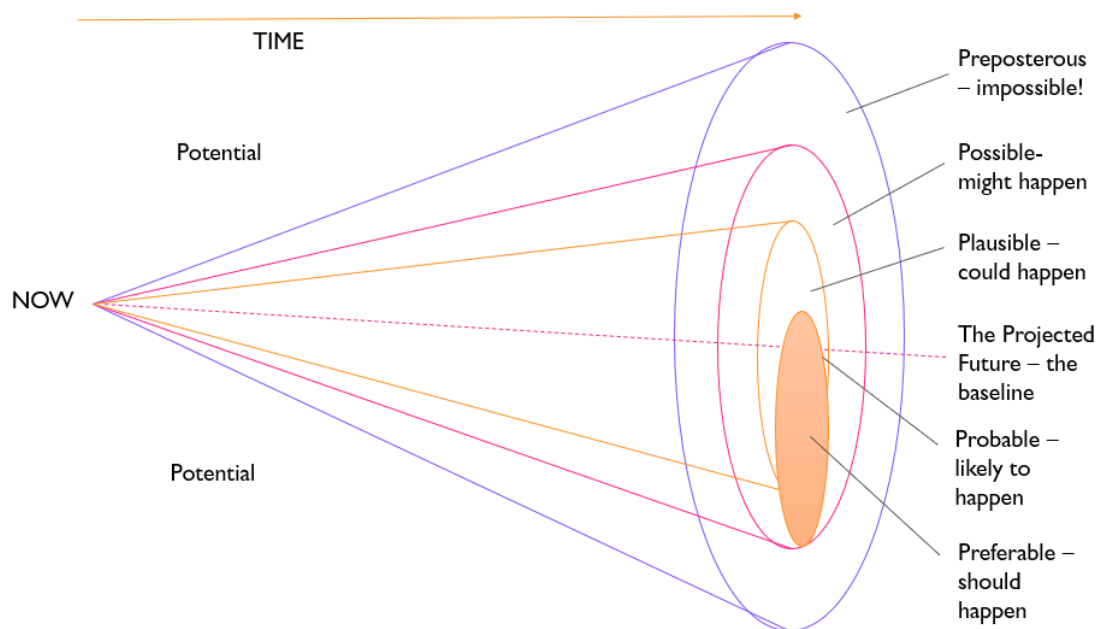

Figure 4. The Futures Cone (adapted from Voros 2017).

Inclusion in foresight practices has often meant including a large and varied number of technological experts in foresight (Loveridge & Street 2005; Andersen & Andersen 2017). Gouache (2022) argues that foresight is often considered the domain of experts and decision-makers and that laypeople are not capable or legitimate to think strategically about the future: futures thinking only involves politicians, scientists, or strategy consultants. Usually, participation in a foresight process is a consultation: ideas or proposals are requested from a larger public, but finally, the experts decide which suggestions are taken forward (Gouache 2022). For foresight processes to be inclusive in the sense that they will illustrate a wide variety of future visions, it is essential to move on from experts-based methodologies towards engaging

different kinds of stakeholders widely (Gudowsky & Peissl 2016). For the process to be inclusive, other types of people and knowledge should be included, especially those traditionally considered outsiders (Loveridge & Street 2005; Nikolova 2014). Loveridge & Street (2005) argue that inclusive foresight would mean a questioning attitude, characterized by feedback and feedforward loops and other open systems behaviors, and exhibit complexity and participatory nature.

Loveridge & Street (2005) list requirements for inclusive foresight processes: 1. The possibility for anyone who wishes to participate, 2. Accepting all participants' contributions as equal, 3. The groups less likely to participate should be encouraged to do so, 4. Trust between participants and organizers, 5. Admission of people who do not represent scientific or technological knowledge, 6. Greater participation from all ages, genders, and levels of society, 7. Accessibility and simplicity of information, 8. Explaining the principles guiding the process for the participants and creating an atmosphere where all contributions are valued 8. Transparency of process outcomes for all.

Pereira et al. (2019) argue that inclusive foresight co-creation processes support the creation of a more inclusive future by supporting different worldviews, values, and a relational understanding of the world. They list characteristics of foresight processes that allow for the creation of more relevant futures: context relevance globally, the inclusion of diverse values and knowledge, engaging stakeholders while simultaneously aware of power structures, and relevance in policy making and for sustainable development.

Matters (2019) has researched the foresight tool Three Horizons from a decolonial perspective, using it in a workshop context with members of the indigenous Métis community. Matters discovered that for the decolonial foresight process to occur, it is essential to understand the past to create the future and the vital role identity plays for the indigenous futures. It is also essential that the method allows for a non-linear, relational understanding of the world. (Matters 2019.)

2.4   Benchmarking of Tools and Methods for Inclusive Foresight

Next, some methods and tools that have the potential for inclusive foresight will be reviewed. At the beginning of a design process, it is helpful to review what other similar designs already exist (Curedale 2018, 216). Benchmarking foresight methods was a wish of the commissioning organization since they wanted to understand which tools exist for inclusive and co-creative foresight processes. Benchmarking allows for comparing different approaches with criteria, identifying possible partners, similar actors, and best practices in a field (Curedale 2018; 233). Benchmarking can, when implemented well, result in collaborations and better designs in a specific field of operations (Ettorchi-Tardy, Levif & Michel 2012). The benchmarking

results will be used in the development process to inform the tool development that will take place as the final part of the research and development process of this thesis.

The tools and methods chosen to be part of this benchmarking all have a few elements in common: they have a co-creative approach, center on creating scenarios for the future and appear to have elements that support an inclusive worldview. Common foresight methods have mainly been left out from the review because they often seem based on Western worldviews (Matters 2019). Most of the chosen frameworks or methods are practice-based methods that have not been created from research nor widely discussed in academia. Four methods were reviewed based on their potential for inclusive foresight co-creation. They were reviewed using criteria gained from the literature review:

1. Potential to engage diverse stakeholders,
2. Supporting worldviews globally or having input from several traditions of thought,
3. Allowing the participants to be their authentic selves with histories and relations,
4. Co-Creative,
5. The potential to dismantle powers structures and norms through critical reflection,
6. Allowing for open-ended and non-linear processes with open outcomes.

Decolonizing Futures

Pupul Bisht has created a rare example of a foresight tool based on a decolonial worldview. Bisht's work centers on storytelling as a tool for foresight. Decolonizing Futures draws inspiration from the Indian storytelling tradition Kaavad. Kaavad is originally a portable shrine describing a pilgrim's journey. During Bisht's process of foresight co-creation, participants fill in a version of Kaavad with images of their desired future. The Kaavad as a tool is non-linear, can hold multiple stories simultaneously, and allows for various interpretations (Bisht 2017). Decolonizing Futures uses storytelling as a tool for the inclusion of marginalized voices and cultural knowledge about the future to inform decision-making and innovation (Bisht 2022). Decolonizing Futures is based on seven principles, illustrated in Table 3. The principles guide the foresight process to become decolonial by reminding that reality is complex and relational and reminding that the participants should be able to bring their lived realities into the process.

Principle	Meaning of Principle
Researcher as Listener	The method aims at disrupting power dynamics between the researcher and researched.

Totality vs. Destruction	Understanding the future as a complex, relational whole instead of analyzing individual elements.
Comfort with Diversity	Multiple stories can be generated, and each subjective storyteller's voice is celebrated.
Particularlity equals Universality	Explicitly bringing the subjective voices of each participant into the process.
Constructive Storytelling	Building images of just an equitable futures by collaboration, imagination, and dialogue.
Not without my History	Addressing lived, individual and collective histories as part of the foresight process.
Power of Orality	Orality as primal mode of expression to as acknowledging non-western traditions.

Table 3. Principles of Decolonizing Futures (Bisht 2022).

Decolonizing Futures is created from a non-Western viewpoint, and it supports a relational and non-linear understanding of the future. It allows the participants to bring their personal and communal histories to the process and engages diverse people. It is based on co-creative workshops. The method does not explicitly discuss a norm-critical approach. Though, it must be noted that this approach has input from only one specific tradition.

Transformative Scenario Process

Adam Kahane developed the Transformative Scenario Process (TSP) in South Africa in the 1990s when apartheid had officially ended, in the so-called Mont Fleur Scenarios process. In the process, society leaders and stakeholders created future scenarios that could point a direction in the tumultuous conflict-laden situation. The TSP aims to create change with the created scenarios, not just showcase possible futures. The method aims to transform: shifting rules, power structures, and mindsets towards a better future for society—the process participants transform through a change in their understandings, relationships, and intentions. The TSP works best when the stakeholders are looking for a change or in a conflict – if there is general satisfaction with the status quo, the process does not bring the best results. The process is designed so that the participants do not need to like or trust each other or agree to begin with – the scenario work creates a shared task that allows for "stretch collaboration."

The Transformative Scenario Process has five steps:

1. Convening a team from across the whole system.

2. Observing what is happening.

3. Constructing stories about what could happen.

4. Discovering what can and must be done.

5. Acting to transform the system.

(Kahane 2012; Bojer 2018).

The Transformative Scenario Process is created in a context where Western and non-Western worldviews conflict, but it is still built on Western foresight methods of scenario process. There is a strong awareness of power and how power relations can affect the process built in the methodology. It is based on a co-creation process and allows diverse people to participate as whole persons. It supports organic end-result and open-ended scenarios.

Future-oriented Service Innovation Process

Ojasalo et al. 2015 combine Service Design and Foresight into a new framework that aims to sense and seize new opportunities and operationalize capabilities needed for future innovation (Figure 5). The process combines participatory foresight methods and co-creative design methods. The phases of the process are: (1) Map and understand, (2) Forecast and ideate, (3) Model and evaluate, and (4) Conceptualize and influence. Different service design and innovation tools are mapped to create a futures-oriented design process in the framework. The process is iterative, creative, and participatory and innovates holistically and systemically. While the framework aims at imagining and creating alternative futures, it also uses human-centric service design thinking to bring the needs and aspirations of users and stakeholders into the center of the process.
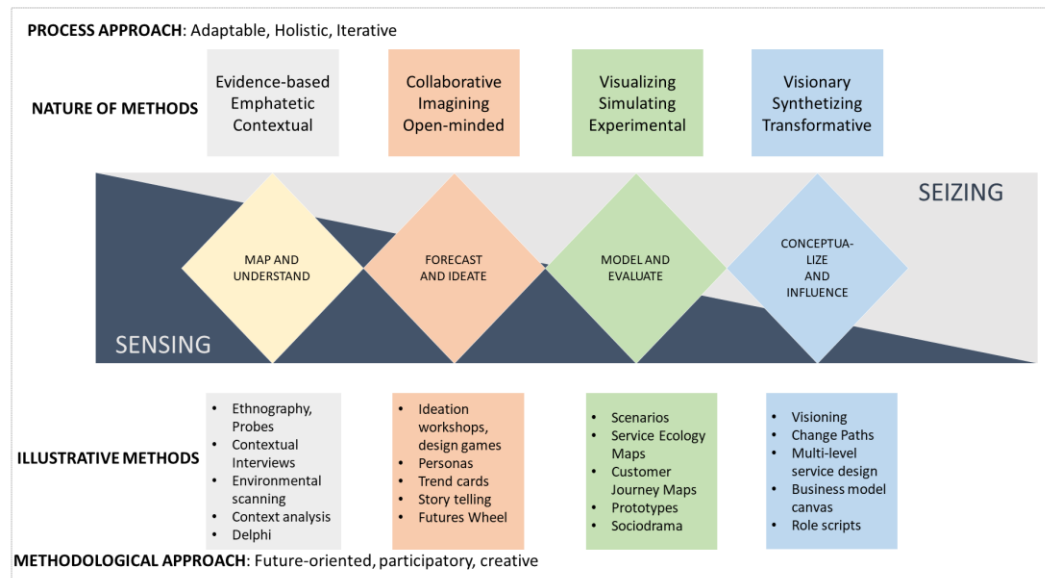
Figure 5. Futures-oriented service innovation process (adapted from Ojasalo et al. 2015).

The Future-oriented Service Innovation Process supports alternative scenarios for the future and is co-creative and human-centric, combining many co-creative tools. The norm-critical approach is not a part of the methodology, nor is the diversity of participants explicitly stated – though the methods used in the framework support diverse participation. The personal or relational aspect of participants is not considered.

Foresight in the Social Change Field

Krizna Gomez has created the Foresight in the Social Change Field toolkit. Instead of just aiming at one, the toolkit looks at several possible futures and attempts at creating capabili-ties with social change and the human rights field. The aim is to extend from a responsive and reactive mode of operating into actively creating preferred futures and managing them when they arrive. The toolkit is meant to be used by diverse stakeholders inclusively, engaging non-experts and whole communities in imagining different futures. Different kinds of participatory design methods from existing design methodologies are suggested for the different phases of the process. There are five steps to the process:

1. Prework.
2. Identifying the building blocks of alternative futures.
3. Constructing alternative futures.
4. Drawing out strategic insights from alternative futures.
5. Making plans and acting. (Gomez 2021.)

Foresight in the Social Change Field is created for global audiences both North and South, but the methods used are primarily from Western traditions of foresight and design thinking. The methodology is created to be accessible to all kinds of people and emphasizes the importance of diverse participants and multiple different futures as outcomes. The norm-critical approach is not explicitly considered, and also, there is no explicit emphasis on personal and relational aspects regarding the participants.

Futures Frequency

Sitra, the Finnish Innovation Fund, has developed Futures Frequency, a method for building alternative futures. The method combines futures thinking and change-making. The method aims to create hope for the future and inspire people and organizations to act toward the futures they desire. The method aims to be accessible to any person or organization without prior knowledge of futures thinking. The method has three stages: 1. Challenging existing assumptions about the future, 2. Imagining desirable futures, and 3. Outlining actions that have the potential to create the desired future. (Dufva, Grabtchak, Ikäheimo, Lähdemäki-Pekkinen, & Poussa 2021). The futures frequency toolkit suggests different tools and methods for the different phases of the process (Sitra 2022).

Futures Frequency is developed to be accessible to all kinds of people without previous foresight experience. It is developed in a Western country, but it has input from global experts. The methods are co-creative and allow for multiple outcomes, even if the method does not explicitly discuss open-ended or non-linear approaches. Norm-critical approach or authentic participation is not explicitly mentioned.

Method Review Conclusions

All of the reviewed methods have a specific potential to support inclusive foresight processes. The comparison of different aspects of the methods is illustrated in Table 4. All of the methods include a strong emphasis on diverse participation, all of them are co-creative, and all of them seem to have the potential for open-ended and non-linear processes that can result in multiple future scenarios. When it comes to supporting non-Western worldviews, Decolonizing Futures is the most advanced of the methods, but also Transformative Scenario Process, Foresight in the Social Change Field, and Futures Frequency have input from other than Western worldviews, even though they are more clearly based on Western foresight methods. Emphasizing personal histories as part of the future and authentic presence for the participants in the process, Decolonizing Futures, and Transformative Scenario Process explicitly mention these approaches. Also, the other reviewed methods may allow for these approaches, but they are not an integral part of the method. When it comes to norm-critical reflection in the process that is mostly lacking in the methods: diversity is taken as an aspect that will automatically bring the results without more profound reflection on its' meaning. Implicitly, it

seems that Decolonizing Futures and Transformative Scenario Process allow for a deeper reflection on inclusion, based on their emphasis on authentic presence in the process.

Based on the review, it seems that Decolonizing Futures and Transformative Scenario Process are the most suited processes when an inclusive approach is desired. All of the reviewed processes do have the potential to be inclusive and create inclusive outcomes, with some modifications and addendums. It also appears that there is a research and development gap for a methodology in inclusive and co-creative foresight co-creation processes since a method taking into account all the aspects of inclusion in a foresight co-creation process does not exist.

Method Aspect	Decolonizing Futures	Transformative Scenario Process	Future-oriented Service Innovation Process	Foresight in the Social Change Field	Futures Frequency
Engages diverse stakeholders.	Yes	Yes.	Yes.	Yes.	Yes.
Supports worldviews globally or has input from non-Western traditions of thought.	Yes, but has input only from one tradition.	To a degree.	No.	To a degree (includes dominant foresight/design methods)	To a degree (includes dominant foresight/design methods)
Allows participants to be their authentic selves with histories and relations.	Yes	Yes.	Does not appear significant in the method.	Not mentioned, but not explicitly excluded from the method.	Not mentioned, but not explicitly excluded from the method.
Co-creative.	Yes.	Yes.	Yes.	Yes.	Yes.

Norm-critical approach through re-flection.	Yes (implic-itly).	Yes (implic-itly).	Not men-tioned.	Not men-tioned.	Not men-tioned.
Allows for open-ended and non-linear processes.	Yes.	Yes.	Yes.	Yes.	Has poten-tial for it.

Table 4. A comparison of inclusive aspects in foresight methods.

3 Research and Development Design and Methodology

This thesis follows the research-oriented development approach, i.e., it includes both research activities and development activities. Real-life practical concerns guide typical research-oriented development, and it aims at changing something in the world (Toikko & Rantanen 2011). Rantanen and Toikko (2009) explain that the research serves the development process as a tool in research-oriented development. In this thesis, the outcome was to develop a concrete tool for the commissioning organization, and the research offered reliable information to conduct the development work (Rantanen & Toikko 2009). The research and development were conducted in two phases, the first part being more concentrated on research and the second part on development.

Design Thinking (DT) processes informed this research-oriented development process. Several DT processes often include similar phases that are named somewhat differently by different method developers (Engholm 2020). The DT process alternates between divergent and convergent thinking, as illustrated in Figure 6. Divergent thinking is typically creative, generative, searching for new opportunities and insights, and occurs in a free-flowing manner, whereas convergent thinking is critical, analytical, and selective and occurs linearly and systematically (Tschimmel 2012; Curedale 2018, 134).
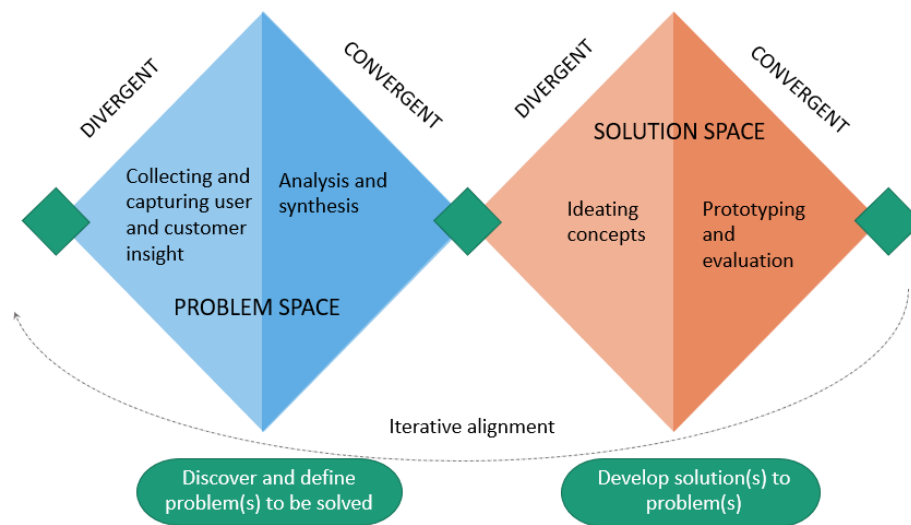
Figure 6. Design Thinking process (adapted from Lindberg et al. 2015; The Design Council 2021).

This research & development process was mostly informed by The Double Diamond process by the Design Council (2021) and an earlier version presented by Lindberg, Meinel, and Wagner (2011, 5). The Design Council initially developed the Double Diamond, and it is a Design Thinking process (Tschimmel 2012). The Double Diamond process has four phases: Discover, Define, Develop and Deliver. The Discover and Define phases are part of the Problem Space, in which the problem is explored, and an initial, intuitive understanding of the problem is developed (Lindberg, Meinel & Wagner 2011, 5). In the Discover phase, the goal is to understand the phenomenon, let go of assumptions related to it, and explore and understand the users, their needs, and contexts (Design Council 2012; Curedale 2018, 216). The data from the Discovery phase is analyzed and visualized in the Define Phase, or synthesis phase (Design Council 2021; Curedale 2018; 296). This phase aims to make sense of the data and connect insights to uncover unmet needs and motivations (Curedale 2018; 296). The Develop and Deliver phases are part of the Solution space, in which alternative ideas are developed, prototyped, and tested (Lindberg, Meinel & Wagner 2011, 5). In the Develop phase, the solution concept is developed by ideating many alternative solutions, considering the needs, business goals, and technology identified in the Problem Space (Curedale 2018; 405; Design Council 2021). The Deliver phase entails the final delivery of the finalized concept after iterations of prototypes and testing (Curedale 2018, 455; The Design Council 2021).

This research and development process (Figure 7) was mainly concentrated on the Problem Space of the DT process to understand what inclusion can mean for foresight co-creation processes and visualizing and understanding that data. The first part of the research and development included the literature review, a benchmarking of foresight methods, and qualitative research interviews among foresight co-creation practitioners. The Solution Space consisted

of a co-creation workshop for stakeholders. The aim of the workshop was to validate the data that had been collected in the previous phase and come up with solutions related to identified issues. After the workshop, the final concept of the Diverse & Inclusive Foresight Co-Creation framework and canvas was developed. The project scope did not allow for a full exploration of the final phase of DT, with thorough testing and iteration of the concept.
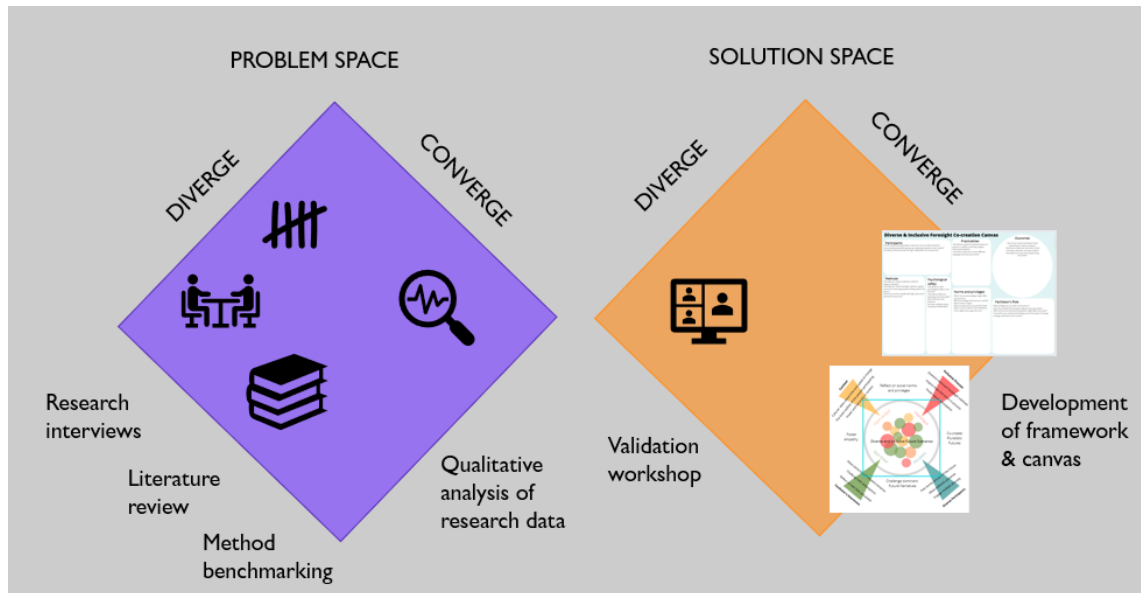

Figure 7. The Research and Development Process.

Data Management Plan

During this research, data was accumulated through interviews and a workshop. The data management and access to different forms of data are illustrated in Table 5. The research data will be stored in the Google documents cloud, Zoom and Teams cloud services, and the Miro tool. Some of the data will be destroyed after the research process since it includes identifying signifiers about the interviewees. The non-identifiable analyzed data will be preserved for future reference for the researcher or given access to the commissioning organization. No data will be published openly. During the research process, the researcher is responsible for giving access to the data. GDPR legislation does not affect the data since no personal details forming a registry are collected as part of the data (see Your Europe 2022). The research interviewees were informed about the research purpose, the data storage, and anonymous participation. The research interviewees were informed of the possibility of being recognized even if presented anonymously in the report.

Type of research data	Data storage, formats, and estimated quantity	Access to the data	After the research is completed
Recorded interviews	In Zoom and Teams cloud services as sound and video recordings (about 8 hours)	Researcher, Transcriber	Data will be destroyed
Interview transcripts	Google Drive documents cloud, a personal computer of transcriber (about 50 000 words)	Researcher, Transcriber	Data will be destroyed
Thematic coding of interview data	Several Miro-boards	Researcher	Data will be preserved for referral purposes
Validation workshop insights in Miro	A Miro-board	Researcher, Commissioning organization	Will be given to the commissioning organization for their preferred use
Validation workshop analysis	A Miro-board	Researcher	Data will be preserved for referral purposes

Table 5. Data Management Plan.

3.1   Research Interviews

Interviews were conducted with eight experts in foresight co-creation processes to understand their experiences of how foresight co-creation processes are facilitated globally and how the practitioners understand inclusion in the context of foresight co-creation. Often, in the first phase of the process, there is also research regarding the internal state of an organization, but in this case, it was omitted due to the commissioning organization wishing to have input from new ideas and stakeholders. The research on the current reality aims to create a solid base for the design process by understanding stakeholders' thoughts, feelings, and needs and identifying the actual problems (Liedtka & Ogilvie 2011, 22; Curedale 2018 216). In this case, the current reality was understood to be the global field of foresight co-creation, and the users and stakeholders are the practitioners that use foresight methods in a co-creative way.

A qualitative data collection approach was taken to collect rich and deep data that would describe the different meanings the experts would find in their work and understand the interviewees' points of view (Sachdeva 2009; Bryman and Bell 2011). The interviews were semi-structured and followed an Interview Guide approach, building questions on the interviewees' answers (Turner 2010). The Interview Guide can be found in Appendix 1. The interview questions were related to the interviewees' experiences as facilitators and designers of foresight co-creation processes, how they have observed the diversity of the participants to impact the process, and what strategies they have used to create inclusive co-creation processes. Due to the semi-structured nature of the interviews, the researcher would not strictly follow the planned interview questions but also asked other questions when the interviewee seemed to have interesting insights in a specific area.

The interviewees were found through contacts of the commissioning organization, the researcher, and through snowball sampling, i.e., asking interviewees to refer other possible interviewees for the research (Etikan, Alkassim & Abubakar 2016). Snowball sampling is widely used in qualitative research and works especially well when the research target group is hard to reach (Etikan, Alkassim & Abubakar 2016). The interviewees were chosen based on their expertise and experience in co-creation processes related to foresight and their experience working in the Global South or emerging markets. The individual interviewees are described in Table 6. Two of the interviewees represented the commissioning organization. Three interviewees also had experience creating a foresight co-creation methodology, and the rest had worked as facilitators in foresight co-creation processes. When choosing interviewees, attention was paid to including people who do not represent globally privileged and overrepresented groups like white people and males. All the interviewees were assumed female, though their gender was not asked.

Position	Foresight and co-creation expertise	Location of activities	Description
Expert	Foresight Methodology Developer	Finland	Foresight specialist. Has been involved in the creation of a foresight methodology. Has service design experience.
Expert	Foresight Methodology Developer	Finland	Foresight specialist. Has been involved in the creation of a foresight methodology. Has service design experience.
Leader	Foresight Methodology Developer+ facilitator	Europe, South Africa, Brazil etc.	Founder in a foresight agency. Has been involved in evolving a foresight

			methodology and has extensive experience in facilitating foresight processes.
Consultant	Foresight Co-creation facilitator	Mexico	A facilitator and coordinator of foresight processes.
Leader	Foresight Co-creation facilitator	Thailand	A leader in a foresight agency and process facilitator.
Consultant	Foresight Methodology Developer + facilitator	Internationally: Asia, Africa, Latin America.	Works as a consultant and has created a foresight methodology.
Leader	Foresight Co-creation facilitator	Internationally: Tanzania, the United States etc.	Works as a thematic lead in foresight and has experience in foresight co-creation facilitation.
Expert	Foresight Co-creation facilitator	Internationally	Works as foresight analyst supporting co-creation and foresight processes on a strategic level.

Table 6. The research interviewees.

The interviews were conducted via Zoom or Teams since the interviewees were located in different countries, except for one interview, which was conducted face-to-face. The interviews were approximately 40 to 60 minutes in duration. Two of the interviews were conducted as pair interviews with two interviewees simultaneously. In these cases, the interviewees were close colleagues from the same organization. The interviews were recorded by the researcher and transcribed by a professional transcriber.

3.2 Analyzing Interview Data

In the Define Phase, the interview data was analyzed and visualized on a Research Wall that provided a place for the data analysis and to identify patterns (Stickdorn 2022). The transcribed interview data was analyzed through coding. The researcher read through the data with research questions in mind and searched for sections and meanings related to the research questions. An online tool, Miro, was used to create a Research Wall of initial coded snippets of data, as illustrated in Figure 8. Each snippet of data was pasted onto a digital post-it note in Miro and tagged with the appropriate code.
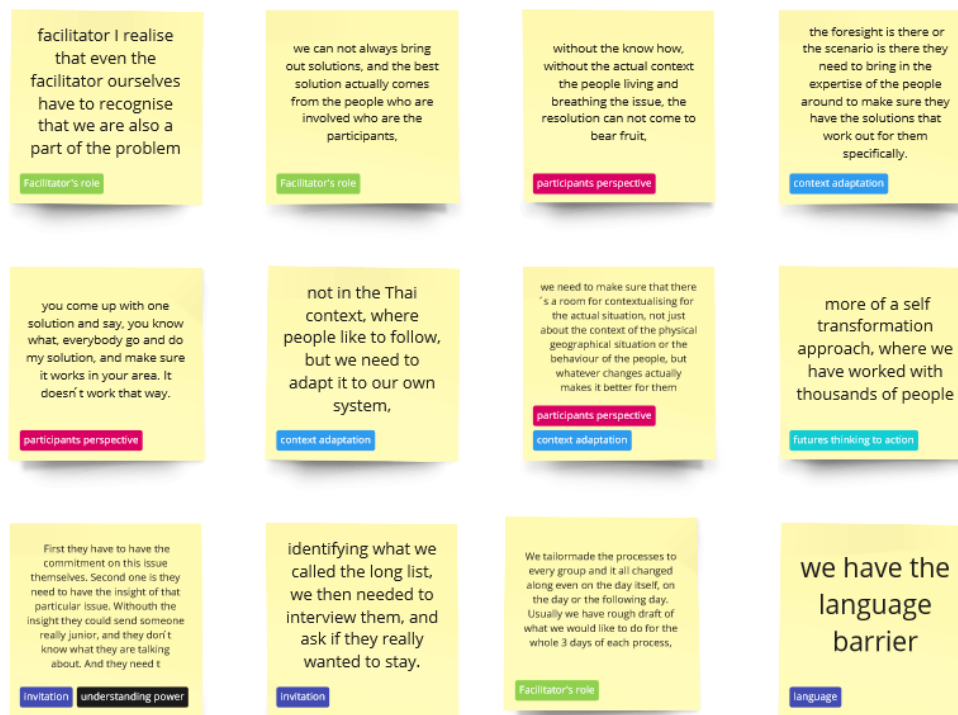
Figure 8. Example of tagged interview data snippets.

After the coding, a thematic analysis was conducted. The codes were combined into larger themes onto a new Research Wall. An Affinity Diagram was created, clustering all the associated tags under thematic headlines. The Affinity Diagram is a methodology that helps with naming, clustering, ranking, and understanding relationships in the data (Dam & Siang 2021). Eleven themes were found in the data, as can be seen in Figure 9.
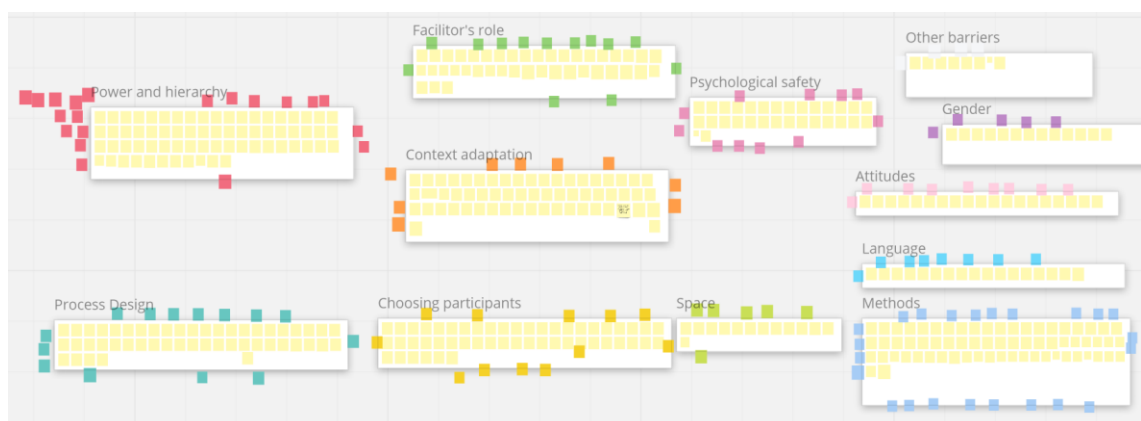

Figure 9. Research Wall with thematic headings.

After this, each thematic cluster was condensed to shorter headline-type of data insights, yielding 17 to 3 insights per each identified theme, as shown in Figure 10. This process aimed

to condense further and clarify the data so that stakeholders could make sense, validate it, and ideate based on it.
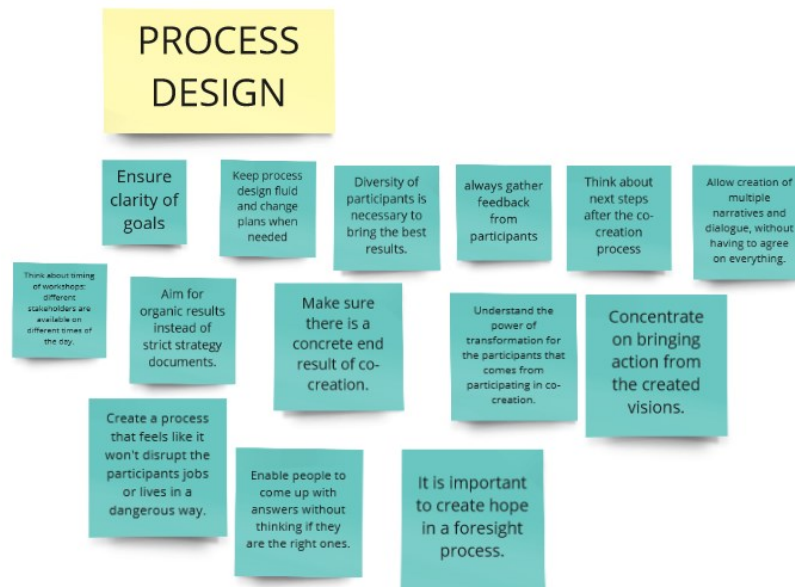

Figure 10. Example of research insights from a theme.

3.3 Validation Workshop

The next phases of the Double Diamond, the Develop and Deliver phases, concentrate on ideating a concept and validating it through prototyping and testing. It was essential to understand which research insights were relevant for the commissioning organization since the final concept development would be created to benefit this specific organization. The interviewees represented different organizations and possibly also different ways of working. Therefore it was deemed essential for the project to understand which data would be relevant. The workshop aimed to create an understanding of which insights were relevant and actionable to this UN entity working in the field of innovation, and to understand how they viewed the development work around inclusion, foresight, and co-creation to take place in the future within their organization.

The duration of the workshop was 1,5 hours, and it was conducted using Zoom and the online co-creation platform Miro. Having the workshop online was necessary because the workshop participants were located in different countries. The Miro platform helped co-creation by allowing the common visualization of the knowledge (Sanders & Simons 2011). A facilitator supported the process, which is important to focus the discussion when participants have different opinions and viewpoints (Kaner 2014, 32). The participants were five UN employees invited by the commissioning organization. The discussions in the workshop were recorded.

Workshop Design

The workshop began with a check-in. Check-ins and check-outs are pedagogical procedures that help group members offer ideas and guidance to each other and enhance the listening in a group (Clemans 2011). The participants used a chosen visual image to explain what inclusion means to them in the check-in. Using images when talking about inclusion-related subjects can be helpful since it allows for people with different knowledge, skills, and perspectives to relate to the topic (Miles & Kaplan 2005). After that, the participants were given definitions for co-creation, foresight, and an introduction to the project.

In the first workshop method, the participants familiarized themselves with the research in-sights from the previous analysis. The participants were instructed to choose insights they found relevant for their organization and bring those onto the next canvas, as shown in Figure 11. On the next canvas, they could define if the insight was "a seedling," i.e., something that they think needs to be developed further in their organization, or "a big tree," i.e., something they feel like they are already doing well with. The idea with the two different categories was to allow the participants to experience that they have already developed their organiza-tion within some of the themes and keep the process solution-oriented instead of having a sense of myriad problems that need solving. The participants brought 47 insights to the seed-ling category and five to the big tree category.
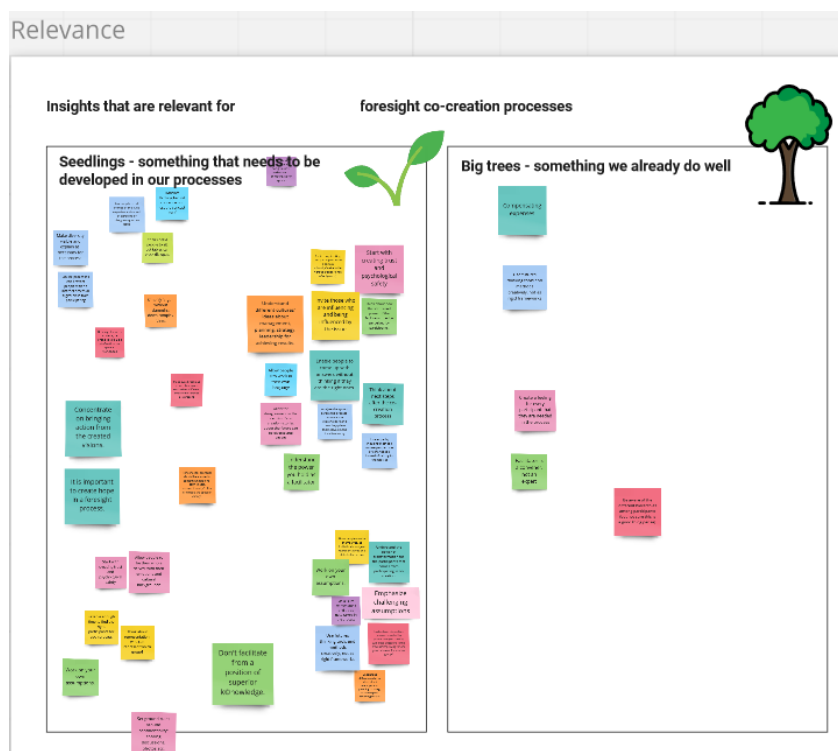

Figure 11.Validating research insights canvas.

The next method aimed to understand which of the chosen insights were deemed operational and important by the participants. The participants were instructed to bring insights they felt were especially relevant to the next canvas. The instruction was to create How Might We - questions from the insights, as shown in the example in Figure 12. How Might We -questions are a method that helps with turning problems found in research into opportunities, developed at Procter & Gamble in the 1970s. How Might We questions are effective in sparking creativity and collaboration. (Berger 2012.) Some design practitioners have recently voiced criticisms about the How Might We method, deeming it unsuitable for dealing with larger societal questions and issues related to inclusion. It only considers the designers, not all stakeholders, relevant to the issue. (Wang 2021.) Therefore, the method was not used to create ideas in this workshop. Instead, it functioned as a way to see which insights the participants deemed most operational and interesting. The participants chose eight insights to develop How Might We-questions and developed 29 questions/ideas based on the insights.
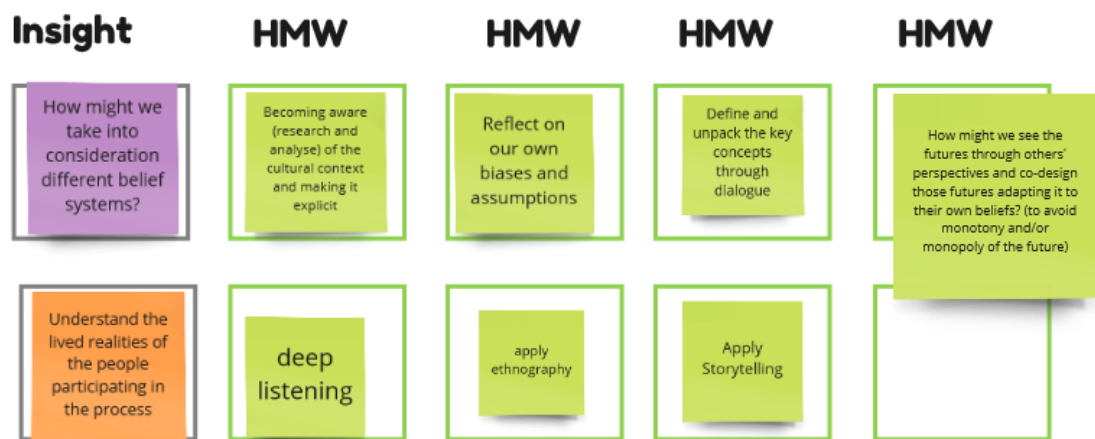

Figure 12. Example of research insights and How Might We questions.

In the final part of the workshop, the participants worked with the Sailboat Retrospective method developed for the Agile approach. In the Agile mindset, reflection is seen as necessary for the continuous improvement and productivity of the team (Matthies, Dobrigkeit & Ernst 2019). The Sailboat is a method that uses a sailboat metaphor to understand challenges, goals, risks, and opportunities, describing them as the wind, the sun, an island, rocks, and an anchor (Matthies, Dobrigkeit & Ernst 2019). Metaphors have been widely used in organizational development to help create buy-in and understanding of organizational changes (Mantere, Sillince & Hämäläinen 2007; Cornelissen, Oswick, Thøger Christensen & Phillips 2008; Lewin 1998; Cornelissen, Holt & Zundel 2011). In this workshop, the sailboat metaphor was used creatively to create a sense of direction where the organization is headed with inclusion and foresight. The participants were asked to discuss the different aspects: the goal of inclusive foresight, supporting forces and structures, challenges and obstacles, and risks if

inclusion is not taken into account, while simultaneously writing down their thoughts on post-it notes. The canvas used is shown in Figure 13.
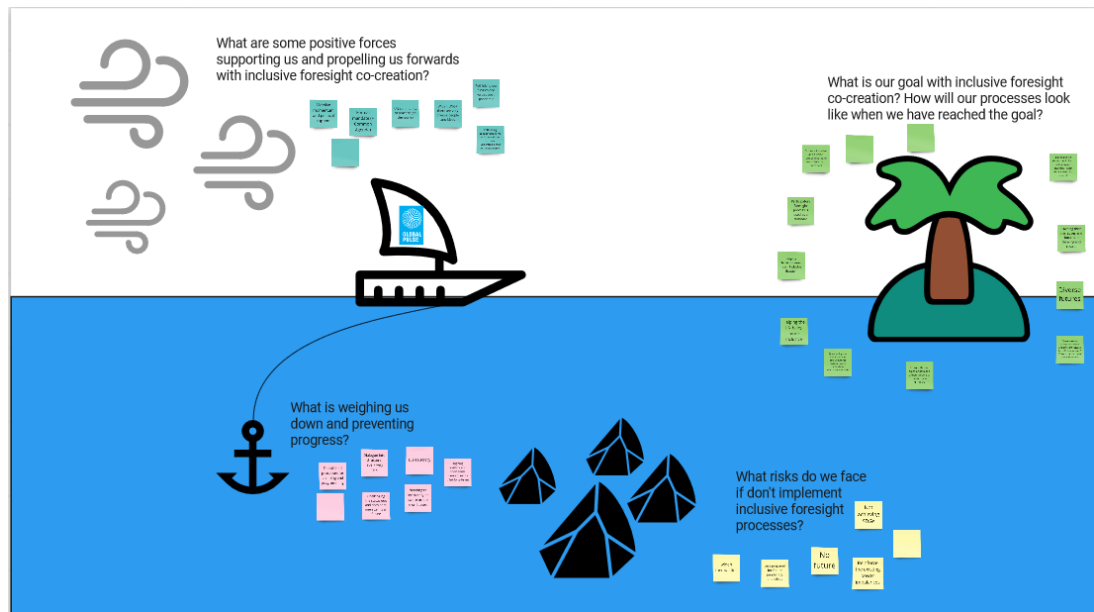

Figure 13.The Sailboat Retrospective Canvas.

4   Results

4.1   Interview Results

The analysis of the interview data resulted in themes that are described in this section. The analysis is a collection of the research insights that emerged from the interviews. All in all, 11 themes were found. The themes describe different essential facets of the foresight co-creation process, as the practitioners have experienced them in their work. Some quotes from the interviewees are included.

Theme 1: Context Adaptation

A prominent theme was adapting the foresight co-creation process to each context in all interviews. The practitioners stressed the importance of context adaptation on many different levels. The thinking about the future should be understandable to different cultures, levels of education, and worldviews. One central insight that many practitioners stressed was understanding how time is viewed in each culture; for example, thirty years can be seen as a very long time, almost impossible to even think about, or so short that barely any change would have taken place. The process facilitator should understand which kind of ideas about the future are relevant and understandable in each context. For example, there might be a belief

in destiny in some cultures. The process facilitator should also understand cultural ideas about management, strategy, and leadership.

> Timelines of scenarios in Brazil had to be very short, because people have seen their world change on such short timeline, so for them to think beyond 10 years into the future is absolutely impossible.

Tools and methods used during the process need also to be adapted. Some foresight tools can be quite technical, for example, the Three Horizons tool. The facilitator needs to think creatively to develop ways of contextualizing the tools for the process participants instead of using the tools as rigid frameworks. Icebreakers and other games used in the process should be adapted to be culturally suitable and inspiring.

There was also a clear idea about human-centricity: the results of the foresight process must apply to each participant's own life and be seen as improving their lives. A practical way of organizing for context adaptation would be to make sure the process facilitators are from the same culture as the participants – though an outsider in the facilitation team might be able to challenge certain harmful cultural norms.

Theme 2: Inviting Participants

When it comes to diversity and inclusion, the practitioners agreed that how participants are chosen to be part of the foresight co-creation process is vital in having actual diversity in the room. They also saw diversity as necessary for creating different future scenarios. The process facilitator needs to think about who is influenced by the issue and who can influence it. Those with a vested interest in the subject are more likely to show up and be active contributors.

The practitioners expressed that it is important to have real diversity instead of just thinking about the token representation of different groups. The participants should also be themselves in the process, not just representatives of a group. The facilitator should consider who can represent which group and have an intersectional mindset to understand minority representation and marginalized groups in each context. The group should be tailored to the purpose, which in some cases can mean excluding some people, to have an equal representation in the group. The invitations also see that more than one person represents each stakeholder group since and experience of being the only one can be challenging. One way of including diversity in the group is to invite people from different organizational levels.

> That means also excluding some people if there are already too many people like them in the process.

Theme 3: Facilitator's Role

The process facilitator holds much power to make the process inclusive. Therefore, the facilitator should have high self-awareness and the capability to reflect on their position. The facilitator should know what they represent to the participants and how they will view the facilitator's position.

The facilitator should never assume a position of superior knowledge. The facilitator should see themselves as usherer and convener of the people instead of a leader or expert. The facilitator should continuously work with their limitations and understand how they contribute to inequality.

> Being a facilitator isn't an easy thing… having to be humble and having to do active listening, is something that needs training from the young age.

Theme 4: Attitudes

The practitioners felt that anyone could be a participant in inclusive foresight co-creation, but they agreed that certain attitudes could be helpful for the participant. Open mind as the most important and challenging own assumptions were mentioned. Also, the participant should be aware that there are no right or wrong answers when working with the unknown. Foresight is essentially working with what may happen, not with what will happen—the participant benefits from curiosity, creativity, and outside-of-the-box thinking.

The facilitator should foster an attitude of entering the uncertainty and being vulnerable. The participants should also let go of certain educational or activist backgrounds and be open to thinking differently from what they have been taught.

> Open mind is a really good point, cause when we start talking about futures you have to have open mind, or at least be ready or prepared to be challenged in your assumptions about futures.

Theme 5: Gender, Age, and Other Diversity Categories

Diversity in the room should be made visible and explained as necessary for foresight. Gender emerged as a prominent theme for inclusive foresight co-creation, more so than other facets of non-privileged positions. The practitioners felt that during the process is important to understand dynamics around power and gender and cultural norms around gender. The facilitator needs to decide if there is a need to separate genders in break-out group work or mixed groups. When inviting participants to the process, it is vital to ensure that there will also be female participants, which can be challenging if stakeholders represent traditionally male organizations like the military. In some contexts, it may be easier for women to participate if there is a possibility for child care. The facilitator needs to deal with sexual harassment and belittling language swiftly to create a safe space for other than the male gender and ensure women do not end up as note-takers during group work.

During the break up groups with his colleagues, the women were asked to take notes or move things on the Miro board.

One of the interviewees also had experience in including transgender participants, which they expressed brought great value to the process by "blowing people's minds." They remarked that the transgender participant may be in the spotlight during the process and should therefore represent an activist mindset that would not mind advocating and being vocal for issues concerning themselves.

Some of the interviewees saw that cultural norms around age could hinder inclusion. In some cultures, people should always defer to the older person. In one case, the practitioner described that they had finally decided to exclude a younger person from the process since they felt that the person would not be able to contribute due to this.

Other person-related factors to consider were different religions or belief systems and that some people are more introverted or extroverted than others.

Theme 6: Inclusive Methods

The interviewees described a wide variety of methods they use to make foresight co-creation workshops more inclusive. Before the process, different methods should be used for a thorough analysis of the context: what kind of hierarchies and norms are present and how the participants place themselves in the hierarchy. Methods should be chosen so that anybody can understand them, no matter their education level or worldview.

At the beginning of the process, goals, values, and ambitions should be aligned. Warm-up methods are important to create an atmosphere of trust and equality – the warm-up discussions should describe issues that are familiar and easy to speak about. One practitioner expressed positive experiences with using mindfulness type of methods at the beginning of the workshop, explaining that the use of mindfulness would defuse conflict for the whole workshop duration. Starting the workshop with a circle practice can bring a sense of authenticity and empathy to the process.

The practitioners stressed that it is essential that the participants can express their emotions and feelings during the process. The methods should emphasize deep listening and an emphatic worldview, building a capacity to imagine different lives. An example of this was instructing the participants to dialogue with another participant they perceived as very different from themselves. Using methods limiting speaking time can lessen power hierarchies and allow all voices to be heard. The facilitator should ask people to talk about their lived experiences instead of issues. Using visuals can be a good way of illustrating concepts related to foresight, diversity, or intersectionality. One practitioner described using a metaphor of colored sunglasses to represent different worldviews.

> I translate the complex dynamics about inequality and inclusion, calling those out in a given setting, using a visual.

The process should allow for not agreeing on one future scenario at the end – there is no need to reach an agreement. The participants should have a sense of ownership regarding the result of the process.

Theme 7: Language

Language use was seen as a potential barrier to inclusion by the practitioners. They stressed that it is important to take into account diverse participants by not dumming down complex ideas about the future, but at the same time translating too complicated concepts into understandable thinking. Using foresight jargon was discouraged. The interviewees saw that it is important to have clarity in all the instructions given to the co-creation participants – the participants should understand the purpose and goal of each activity and the process in general.

> I think it´s my ability to translate concepts, and by translate I don´t just use language, (but) translate thinking.

Practical suggestions about the language included using translators when people speak several languages and allowing participants to work in their language when possible. The practitioners also had some misgivings about using translation in workshops since it might make the experience less than optimal for some participants. There should always be facilitators who speak the languages of the participants. The facilitators should also consider inclusive ways of using language when referring to participants, for example, using their preferred pronouns.

Theme 8: Power and Hierarchy

The interviewees were aware that power structures and hierarchies in the co-creation process could hinder inclusion. They saw that the facilitator needs to have the courage to name power structures and work with them openly. The participants should understand the power structure present in the process, for example, who is funding the process. On the other hand, it would be important to create a sense of equality without some participants ranking higher than others. The participants should not be ranked based on expertise or position. Also, the facilitator should be aware of possible colonial relationships and if they themselves represent a colonial power structure because of where they come from.

> If they are used to speak up, if they have this identity that their opinion actually matters,... how empowered they are, how they view their opportunity to influence the process and this is (a) very cultural thing.

The facilitator should use methods to lower hierarchies and ensure that break-out discussions work when different hierarchy levels are present. The facilitator should clearly understand the present power structures and hierarchies and the different relationships with the partici- pants. The facilitator should be wary about creating win-loose situations between stakeholder groups. Before anything else, the participants should be encouraged to see themselves as ac- tive agents in changing their future, which is not always self-evident with underprivileged people. It is also good to be aware that in some contexts, the participants may appear as trai- tors to their own communities for participating in a foresight process – in those cases, it is im- portant to protect the participants' identities.

> People's voices are most importantly needed to (be) heard so everyone is given the same allotment of time, either 30 seconds, one minute, maximum is 2 minutes, either talking to large groups, talking in pairs, talking in threes, talk- ing in fours.

The practitioners saw some possible problems with having people high up in hierarchies par- ticipating in the process. Highly ranking individuals may be too busy to participate properly in co-creation, or they may want to bring in their assistants, which creates a layer of hierarchy in the workshop. Leaders may also assume it is natural for them to take a lot of speaking time in discussions and feel challenged about foresight scenarios that often shake the status quo. Another kind of people the practitioners were wary of as participants were academics and other high-level experts, who might assume a position of power due to their expertise.

Theme 9: Process Design

When planning and designing the whole inclusive foresight co-creation process, the practi- tioners expressed a few different overall principles: first, the scenarios created in the process should not feel like they could potentially upend the whole lives of the participants. A fore- sight process should create hope, not despair. There is also a power of transformation in the process that the facilitator should be aware of. Second: There should always be a concrete result to the process, even if the participants should be left free to disagree on some of the scenarios. The process should be designed to create action from the results since scenarios without outcomes often seem to be an issue in foresight co-creation.

> We wanted to create something that first of all would combine futures thinking to change making, because we had a knowledge that those two stages are hard to link together.

The facilitator should keep the co-creation process fluid and change plans when needed. There should be a clear goal for the whole process. The end result of the process could be more organic than a strict strategy document. In the process design phase, the facilitator should think about the long-term impacts of the process and what will happen after the pro- cess – how are the ideas implemented and developed afterward? However, the facilitator

should keep in mind that to give ownership to the participants, they need to see that the implementation can take any form since the facilitator should not control that. As a practical tip, the facilitator should always gather feedback from the participants.

Theme 10: Psychological Safety

The practitioners deemed psychological safety essential for an inclusive co-creation process. The practitioners had varied opinions on the best way to achieve that. One suggested method was to create workshop rules at the beginning of the workshop, another to preferably to rules to work with a circle practice, in which every participant shares something personal. Rules should be made about confidentiality and what can be shared about the process outside, e.g., on social media or photos. People should be allowed to be themselves, with all of their emotions and cultural backgrounds, though minorities should not be spotlighted. All participants should feel that they are an integral part of the process and necessary for it.

If some stakeholders in the process are in conflict, they should get acquainted with each other informally first before issues are discussed. The facilitator should think if the people in conflict should directly interact during the process, such as in break-out groups. In really sensitive issues, it may be necessary to forego some co-creation and instead use one-on-one methods for foresight development. It is also possible to allow people to participate without using their names or titles.

> Sometimes if there´s a lot of sensive issues it´s hard to do this in a workshop context, and you just have to do a lof of one on ones and then do the analysis, and get the validation and feedback.

Theme 11: Practical Organizing

Some practical organizing tips for more inclusive foresight co-creation from the practitioners included thinking about how workshop spaces support the participation of different people. The room should be accessible for people with limited mobility and, for example, have comfortable chairs for older people. Tables can obstruct communication, was the opinion of some of the interviewees. There should be food that meets the dietary requirements of the participants. To make the event truly inclusive, the participant should be reimbursed for any costs for participation. The timing of the workshops should be considered as well since for some participants it might be difficult to attend in the daytime, and for some others in the evening. For some mothers organizing childcare might enable them to participate.

> What´s the physical container we are working in, are people physically comfortable, do they have food that meets their dietary requirements, is it tasty, are the chairs comfortable, is it visually appealing to be there.

When it comes to online workshops, the practitioners said that they both help and hinder inclusion. On the one hand, for non-digitally savvy and older people taking part in online co-

creation is very demanding. Still, on the other hand, online workshops work well for people with limited mobility, allowing them to participate easier.

4.2   Validation Workshop Results

In the validation workshop, the participants were asked to assess the usability and relevance of research insights in their organization. In the first part of the workshop, they familiarized themselves with the research insights that were grouped into themes. The participants selected insights into two categories: seedlings, which were something they felt should be developed in their organization, as well as big trees, which were things they already excel in.

During the workshop, the participants expressed that they felt there was still a lot to develop within the theme in their organization. Therefore, the number of insights they chose for the big trees category was relatively small.

Category	Insight
Practicalities	Compensating expenses for all participants.
Inclusive Methods	Using futures thinking methods creatively, not as rigid frameworks.
Psychological Safety	Creating a feeling for each participant that they are needed in the process.
Facilitator's role	The facilitator is a convener, not an expert.
Power and Hierarchy	Being aware of the different hierarchies among participants.

Table 6. Categories and insights from the Big Trees exercise, i.e., well-developed factors in the organization.

The participants chose a much greater number of insights into the seedlings category that they felt they needed to develop further in their organization. They also expressed some shame and amazement, saying that they felt embarrassed that so much remains still to be developed. This reaction shows that the participants were highly aware of the importance of inclusion – not necessarily that their organization would be lacking in inclusion. The insights chosen to the two categories are presented in Table 8 and Table 9.

Category	Insight
Process Design	- It is important to create hope in a foresight process. - Concentrate on bringing action from the created visions. - Enable people to come up with answers without thinking if they are the right ones. - Think about the next steps after the co-creation process. - Understand the power of transformation from participating in co-creation for the participants.
Psychological Safety	- Set ground rules around confidentiality: which conversations and photos can be shared outside and on social media. - Emphasize challenging assumptions. - Allow people to be their whole selves, with their emotions and cultural backgrounds. - Start with creating trust and psychological safety. - Allow for disagreement in the results of co-creation- stories about the future can be diverse and varied.
Inviting Participants	- Think about representation: who can represent which group? - Reserve enough time to find the right participants for each process. - Allow people to also be themselves, as individuals, not just representatives of a stakeholder group. - Invite those who are influencing and being influenced by the issue. - Avoid inviting one participant from a specific minority/stakeholder group ("experience of onlyness").
Inclusive Methods	- Make diversity visible and explain as necessary for the process. - Online processes can prevent people with no internet access or digital skills from participating. - Ask people to tell stories of their lived experiences instead of agreeing or disagreeing on an issue. - Analyze the system before the process - the stakeholders and how they place themselves in the local hierarchy. - Use empathy-inducing methods to take other people's perspectives instead of talking for themselves. - Use futures thinking tools and methods creatively, not as rigid frameworks.

Power and Hierarchy	• Be wary of leaders who may be prone to take up a lot of airtime and space in workshops. • Make sure break-out group discussions work when different levels of hierarchies are present. • Understand hierarchies between stakeholder groups – avoid creating win-lose situations in the process.
Language	• Translate thinking behind concepts- not just the concept itself. • Allow people to work in their language.
Gender, Age and Other Personal Qualities	• Make sure women do not end up as note-takers in the process. • Make sure to compensate for expenses.
Facilitator's Role	• Think about how participants may perceive the status and power of the facilitator. • Work on your assumptions. • Understand the power you hold as a facilitator. • Do not facilitate from a position of superior knowledge.
Context Ad-aptation	• Simplify jargon without dumming down complex ideas. • Understand different cultures' ideas about management, planning, strategy, leadership for achieving results. • Timelines for scenarios should be adapted to context: what is long-term in each context/country/culture? What is the speed of change?
Practical Or-ganizing	• Chairs help people to sit, but tables can block dialogue.

Table 7. Chosen insights from the Seedling exercise, i.e., what needs further development.

Next, the participants were asked to create How might We questions (HMW) from the chosen insights in the Seedling exercise. The goal of this exercise was to define which insight the participants deemed the most actionable and interesting for their organization. Usually, HMW-questions aim to create ideas for solutions, but in this case, the exercise was used more to understand actionability. The table below presents the insights the participants chose and the proposed solutions. Insights and HMW-questions are presented in Table 10.

Insight	HMW Question (How might we -beginning is left out)
Taking different belief systems into consideration.	• Becoming aware (research and analyze) of the cultural context and making it explicit. • Reflect on our own biases and assumptions. • Define and unpack the key concepts through dialogue. • See the futures through others' perspectives and co-design those futures adapting them to their own beliefs? (to avoid monotony and monopoly of the future)
Acknowledge that some people are introverted and others extroverted - design process accordingly.	• Use several ways of providing input: written, oral, etc.
Work on your assumptions.	• Be aware of your assumptions on different levels: the future, the process, the outcome etc. • Actively find contradicting views on your assumptions. • Ask what if questions.
Do not facilitate from the position of power.	• Make sure the participants can relate to facilitators. • Be humble. • **B**e open and accessible.
Emphasize deep listening.	• Giving open-minded, genuinely interested attention to others. • Avoid too long sessions; take breaks. • Try to understand where the person is coming from. • Encourage responding, not reacting.
Understand the lived realities of the people participating in the process.	• Deep listening. • Apply ethnography. • Apply Storytelling.

Understand hierarchies be-tween stakeholder groups - avoid creating win-lose sit-uations in the process.	• Map the hierarchies and power structures before a foresight exercise - and validate/check them during the session/process.
Avoid only inviting one par-ticipant from a specific mi-nority/stakeholder group (experience of "onlyness").	• Mapping diverse stakeholders and engaging with them early on to ensure they are not included as part of a quota to fill. • Shift the conversation around minorities when it comes to inclusion? (Just because it is not Western-centric, it does not mean a group is a minority). • Build trust and long-term ownership of our work with other stakeholders to ensure they want to par-ticipate in the process.
Think about the next steps after the co-creation pro-cess.	• Co-design a process with clear objectives about the known unknowns of the futures. • Ensure sustainability of work that is about long-term thinking. Who follows up? • Improve the foresight process.

Table 8. Chosen insights and How Might We questions.

At the end of the workshop, the participants were asked to create a vision for their organiza-tion regarding Inclusive Foresight Co-creation using the Sailboat metaphor method. As the wind or positive forces propelling their organization forwards, the participants identified the covid19 pandemic as one crucial factor, making them rethink collaboration in the organiza-tion. They also saw that their organization is already very diverse and that there is a mandate to develop the themes and an internal working group developing. They also felt that the issue has political momentum and support currently. As the anchor or forces that hinder progress in the issue, they identified bureaucracy and difficulty changing existing planning processes and programming, bringing dialogue onto the structural level, and the difficulty of being aware of own biases. They also identified short-term conflicts and thinking as a hardship, preventing long-term views.

As the goal (the island in the exercise) when the commissioning organization has reached a prominent state of inclusivity in foresight co-creation processes, they saw that they could help the whole UN become more inclusive. The foresight processes should be participatory as a standard in the organization. Their organization should become more explicit about the lim-its of inclusion and diversity, for example, in the data used, and the decision-makers should

consider inclusion when making decisions. On a more philosophical level, they saw the whole goal of inclusive foresight co-creation to be a diverse future, and the stakeholders owning their futures narratives and co-creation process results. They identified that it would be important to question the dominant futures images and use alternative futures thinking methods, and use different kinds of data in processes to create more pluralistic futures. They were also pondering if it needs to be accepted that the futures will be different for different people.

As the rocks or the risks, if inclusive foresight co-creation is not implemented, the participants envisioned widening inequalities, less preparedness for future crises, not achieving the Sustainable Development Goals, and reinforcing existing power imbalances. "No future," wrote one participant as a very concise summary of the risks.

5   Discussion

The first research question was: What factors are crucial for inclusive foresight co-creation processes? The research interviews gave answers to this question, allowing for exploration of experiences of co-creation facilitation for foresight in different global contexts. Some of the prominent themes in the research results were following previous theories and concepts around inclusive and diverse co-creation. The second research question was: How can a global organization working in different demographic and cultural contexts design inclusive co-creation processes for foresight? This research question is answered primarily through the validation workshop results, and as an outcome, a framework and a tool for inclusive foresight co-creation are created.

The results point strongly towards diversity as crucial for a successful foresight co-creation process. Diversity is acknowledged to be crucial for co-creation in the previous literature (Torfing & Sorensen 2011; McInerny 2016; Phillips 2014, Steen 2013; Nahi 2018), and similarly to Trischler, Kristensson, and Scott (2018), and there was an understanding that the facilitator is crucial to leveraging the impact of diversity to produce innovative results. Diverse co-creation is also paramount to successful foresight processes, as discussed by Gudowsky and Peissl (2016), Nikolova (2014), Aalto et al. (2022), Loveridge and Street (2005), and Pereira et al. (2019). Inclusion in this research emerged from the facilitator's understanding of the context, using co-creation methods that support inclusion designing the process with inclusion in mind from the beginning. The interview results demonstrate an understanding of inclusion as being heard and respected, a sense of belonging, as well as giving space to all voices, as Tan (2019), Atcheson (2021) Frost and Alidina (2019), and Fanshawe (2022) propose. The results of the validation workshops demonstrate a more intersectional understanding of inclusion, with emphasis on reflecting on the possible bias of the facilitator, hierarchies in the process, and

being aware of power dynamics between different stakeholder groups, more following the thinking of Andersen & Andersen (2017), Frost and Alidina (019), Christensen (2018), Özbligin & Syed (2015), and Lewis & Tatli (2015). They suggest intersectional perspectives to inclusion and diversity management. The results point towards thinking about diversity categories in each context based on the context's culture and norms and avoiding inviting people into the process to represent a certain minority category, showing that intersectional thinking and understanding social norms are important for the co-creation process. The former is a deeper level of thinking about co-creation participants than Hogan's (2007), who only suggests checking that the co-creation also includes people who do not represent formal power and that minorities are present. The results suggest a self-awareness and reflection for the facilitator to consider personal bias and assumptions as a strategy for counteracting social norms and power structures. This insight is in alignment with Christensen et al. (2021) Iskender (2018), and Goodwill et al. (2020), who suggest reflection and awareness of social norms as a tool to create inclusion in a design process. Wikberg and Jahnke (2017) suggest extending the awareness of norms and power structures to the co-creation participants through a tool they call Tactics for Norm-creative innovation.

As pointed out by Ali and Liem (2015), Sanders and Stappers (2008), and Nahi (2018), the results show that co-creation should endure the whole design process. These results point towards a similar conclusion for a futures design co-creation process, adding that there also needs to be an emphasis on what happens after the process in the way of concrete results. Especially in the validation workshop results emerges an understanding of a decolonial understanding of the dominance of Western foresight tools, as has also been suggested by Kapoor (2001), Bisht (2017), Mazé (2019), and Matters (2019). The workshop results also demonstrate an understanding of the importance of relational, plural, diverse, and non-linear understanding of the future and time, as has also been discussed by Bisht (2017) and Pereira et al. (2019). A critical insight in the results was the participants' ownership of the co-creation results, i.e., the participants should feel ownership toward the created scenarios. Loveridge and Street (2005) propose that it is enough to be transparent about the co-creation outcomes, but this research suggests otherwise.

One of the main findings during the research and development process was that for the foresight process to be inclusive, the inclusion needs to extend to the process outcomes. It is not enough to provide an inclusive co-creation process, but the created future scenarios should also demonstrate an inclusive future image. The scenarios should offer an inspiring future view to people from diverse backgrounds and experiences, as has also been proposed by Ono (2003): a futures design process should inspire hope, and these results show that inspiring hope and action is significant for a successful foresight co-creation.

Psychological safety as a factor for inclusion emerged as a significant theme in this research, and that has been noted as a significant circumstance for successful inclusive collaboration before (Bresman and Edmondson 2022; Hogan 2007; Adams, Bell and Griffin 2007). The previous literature suggests the practice of co-creating rules for conduct with the participants at the start of the co-creation process to increase psychological safety (Jones 2021; Bens 2018; Adams, Bell & Griffin 2007). The results, in this case, were more ambiguous – it appeared that the interviewed participants were at least somewhat conscious that the concept of setting rules in a workshop was connected to the power position of the facilitator, as Goodwill et al. (2020) propose, and that therefore they did not see that co-creating rules would always be beneficial for inclusion. In this research, psychological safety emerges more from setting ground rules around confidentiality instead of behavior and allowing the participants to bring their whole selves into the process in an authentic way. The authentic presence of people with histories and past selves aligns with Pupul Bisht's (2019) thinking about the decolonial foresight process.

Many of the insights on facilitating co-creation were per some literature around facilitating intercultural or multicultural groups (Hogan 2007, Berardo & Deardorff 2012). Similarly to Hogan (2007), the results point towards inclusion emerging from both the practicalities of the workshop organizing, like the accessibility of the co-creation location, and supporting participants financially, if necessary, to understanding the cultural context in the planning phase of the process. Berardo and Deardorff (2012) suggest that the facilitator should understand what facilitation means in each cultural context, display cultural humility and suspend cultural norms, and Hogan (2007) suggests checking activities for cultural suitability in regards to, for example, touching or challenging superiors. The results of this research point toward a fuller analysis of the context, suggesting that the co-creation designer should also understand how the outcomes of co-creation will be relevant to the co-creation participants and understand cultural ideas around strategy, management, and leadership. However, the results also offer similar suggestions as Hogan (2007) about using facilitation methods that hail from the context.

The role of language in inclusive facilitation has been emphasized by, for example, avoiding ethnocentric idioms (Berardo & Deardorff 2012), explaining used terms, concepts, and frameworks in a culturally understandable way (Hogan 2007), and avoiding culturally inappropriate humor (Hogan 2007; Berardo & Deardorff 2012). The theme of language was highlighted in the results, emphasizing cultural translation foresight methodologies and concepts that might be new for the participants and discussing working with translators that may both hinder and support inclusion. Somewhat differently from Hogan (2007) and Berardo and Deardorff (2012), the results emphasized having facilitators who speak the participants' language.

Some of the attitudes and behaviors suggested for fostering inclusive co-creation for both the participants and facilitators were empathy, deep listening, open-mindedness, creativity, and staying in the process despite uncertain outcomes. The results demonstrate that it is elemental that the participants of a foresight co-creation process understand the basic premise of foresight: foresight is not about predicting the future but creating alternative futures that can be influenced through action (Sardar 2010; Dator 2002; Murgatroyd 2015; Meristö & Laitinen 2021; Ojasalo, Koskelo & Nousiainen 2015). In the results emerged the emphasizing the of the attitude of an open mind and an ability to deal with uncertainty. These insights raise some questions concerning inclusion: how can the comfortability of an uncertain future and open-mindedness be created for people who may have been marginalized and possibly experience a sense of powerlessness, as also described by Inayatullah (2018)? Empathy and creativity are central to any design process (Brown 2008; Liedtka & Ogilvie 2011), and listening skills are emphasized in multicultural co-creation facilitation (Hogan 2007). These elements may point the way to resolving the dilemma of simultaneously being comfortable with uncertain outcomes and having a safe and inclusive co-creation environment.

Awareness about power and hierarchies emerged as a significant theme in the results. In Kashtan's (2020) words, the results are more concentrated structural power than social power related to norms. There was a clear understanding about people with higher status affecting the process and less emphasis on social norms creating power dynamics in the co-creation. Though, it seemed to also depend on the context of the interviewee; for example, interviewees who had worked in Asia put more emphasis on status created by the older age of the participants, which would represent a diversity category that accumulates power the older participant. Awareness of power dynamics related to gender was clearer in the results, and other diversity categories and norms mentioned as impactful were education and personal qualities like introvertedness.

Interestingly, the results pointed more towards an open acknowledgment of the power dynamics than what is suggested by Kashtan (2020), who does not recommend open discussions around power dynamics in a co-creation process. The results demonstrate several strategies that may lessen structural hierarchies in the process with facilitation methods, such as methods that limit and equalize speaking time. One interesting insight concerning foresight and power dynamics was that designing future scenarios may feel especially threatening to those in power since it can feel like an activity that will shake the status quo. This fact requires some preparation work from the facilitator before the process. When it comes to social hierarchies and norms, they should be considered in the planning process by understanding the context, analyzing existing norms and power structures, and designing the process accordingly. In practice, this would extend to planning who is invited to participate, which methods are used, and how reflection is used as a tool.

The results showed that similarly to Kashtan (2020) and Goodwill et al. (2020), the facilitator holds privilege and power in the process and needs to be aware of how they use the personal power due to their position. As has been described in facilitation literature (Sipponen-Damonte 2020; Kantojärvi 2012; Jones 2021 and Bens 2018; Hogan 2007), in the results, the role of the facilitator should be a convener, not an expert. The facilitator should reflect on their assumptions and bias ahead of the co-creation process.

A comprehensive set of measures can be taken during the process to ensure inclusivity, from choosing participants, using suitable methods, having the right kind of practical arrangements, and understanding existing power hierarchies and social norms. The created future scenarios should support pluralistic narratives and support the participants' worldviews for the process to be genuinely inclusive. When operating globally, this can mean challenging dominant foresight methodologies and coming up with new methods to support different understandings and ways of relating to the world. Therefore, the process designer and facilitator should take an active stance to make this happen and be sure to know the context they operate in, if not familiar with it beforehand.

A framework and a co-creation design tool were developed from the theoretical background, interview results, and validation workshop results: A framework for Inclusive Foresight Co-Creation and The Inclusive Foresight Co-Creation Canvas. The framework aims to visualize the most critical factors that need to be present in the foresight process to make it inclusive and co-creative. The purpose of the canvas was to operationalize the insights from the framework into a practical tool that can support the facilitator in the process design and allow the facilitator to plan and analyze the context ahead of the process, the importance of which was one essential finding of the research process.

Framework for Inclusive Foresight Co-Creation

The Framework for Inclusive Foresight Co-Creation (Figure 14) presents the main findings of the research& development process.

Non-linear, pluralistic futures. The Framework is created as a circular, non-linear image since, during the process, an important insight was that in order to support a different understanding of time and the future, it is necessary to visualize time in other formats than the common linear format that often is seen in foresight and co-creation tools. The spheres in the center visualize the pluralistic and interlinked nature of the created futures scenarios.

Context. Context refers to understanding the context of the foresight co-creation process. To implement an inclusive process, the process facilitator needs to have an in-depth understanding of the cultural context of the process. Especially understanding how time and speed of change are perceived in the context is crucial to creating actionable and realistic scenarios

for the participants. Analyzing the context ahead of time also helps understand the participants' power relations and bring in the lived realities of the people into the process. The contextual understanding allows for true inclusion since the process will be centered on the participants' experiences.

Inclusive Process. In an inclusive process, the methods and arrangements support inclusion and allow for other than the dominant foresight methods to be used when it is appropriate in the context. The chosen methods foster equal participation from everyone in the process, no matter their place in a hierarchy or conforming to social norms. The process will inspire hope and especially action from the participants to elicit positive change.

Diverse Participants. The right participants are the cornerstone of an inclusive process – for the pluralistic futures to emerge, diverse participants are needed. The participants should not represent token diversity but be people who are influenced and influencing the issue. The right amount of effort should be put into finding the right participants, and people should feel at home in the process – not experiencing "onlyness" but feeling there are others like them in the participants. It should be acknowledged that the past is often part of the future, and the participants should be able to bring their personal histories into the process, using methods that support authentic presence.

Facilitator's Awareness. The process facilitator should practice awareness of their position in the process to facilitate from a perspective of inclusion. The facilitator should remember that the process participants need to have ownership of the created scenarios to inspire the actions that can make the future happen. The facilitator should always start from a position of challenging their own assumptions and reflecting on their own biases and privileges concerning the context.

Reflecting on Social Norms and Privileges, Co-creating Pluralistic Futures, Challenging Dominant Future Narratives, and Fostering Empathy are vital elements that ensure the inclusive process. There needs to be empathy for different worldviews and an understanding of societal norms and power structures to create the needed inclusion in the process and outcomes. The co-created futures should have a pluralistic nature, and they should allow for the challenging of dominant future narratives to create futures for which the process participants can experience ownership, and that will elicit action in the participants.
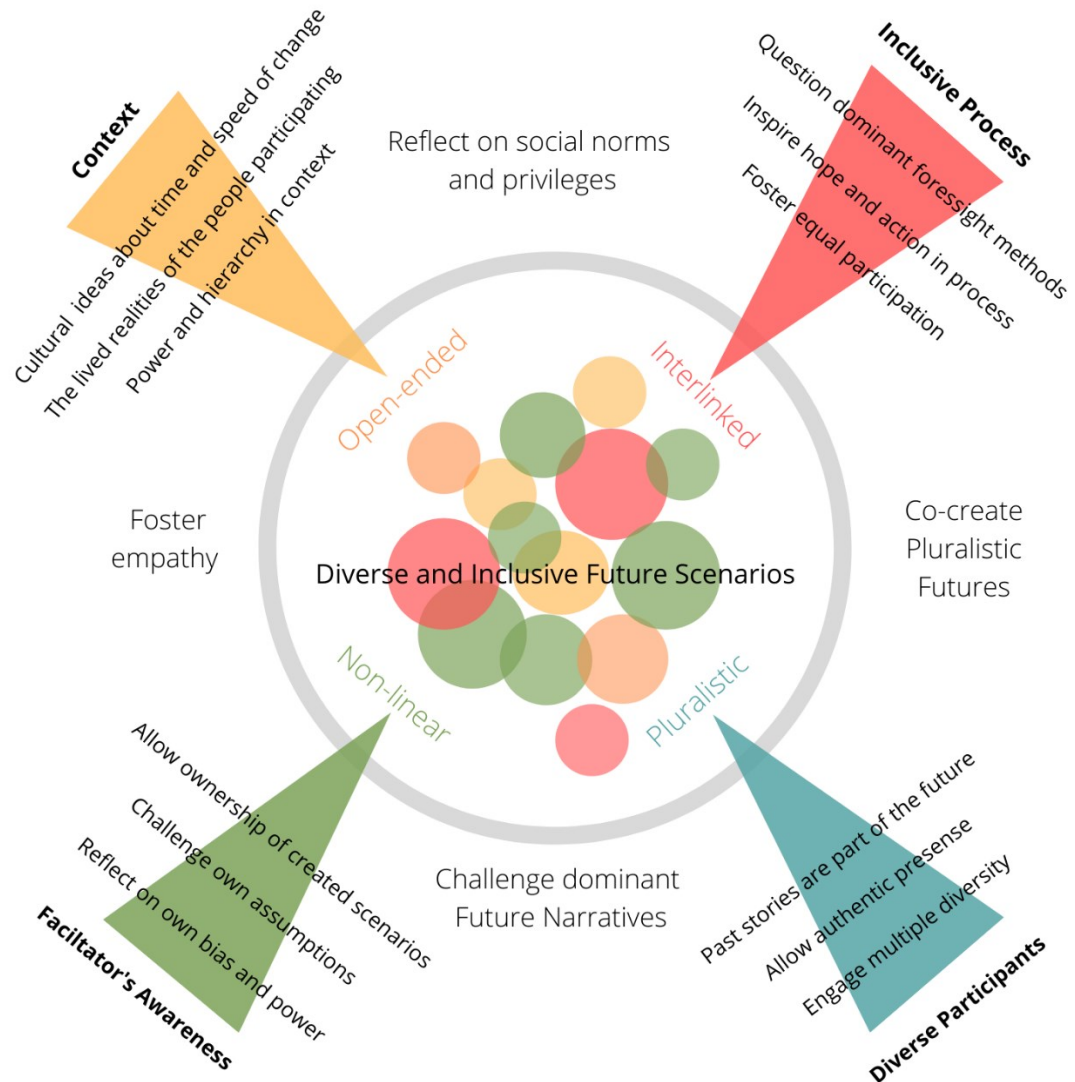
Figure 14. Framework for Diverse and Inclusive Foresight Co-creation Process.

Inclusive Foresight Co-Creation Canvas

The Inclusive Foresight Co-Creation Canvas (Figure 15) is a tool to operationalize the Inclusive Foresight Co-Creation Canvas insights. The tool aims to provide the process facilitator with questions that help design an inclusive co-creation process and pay attention to the important elements. During the research and development process, one of the findings was that it is important to understand where the foresight process takes place to design an inclusive process that leads to inclusive outcomes. The canvas helps the process designer analyze the context with the questions in the canvas. The process designer can use the canvas in the planning phase of the foresight process to map out different aspects of the process and make plans regarding the inclusion aspects.
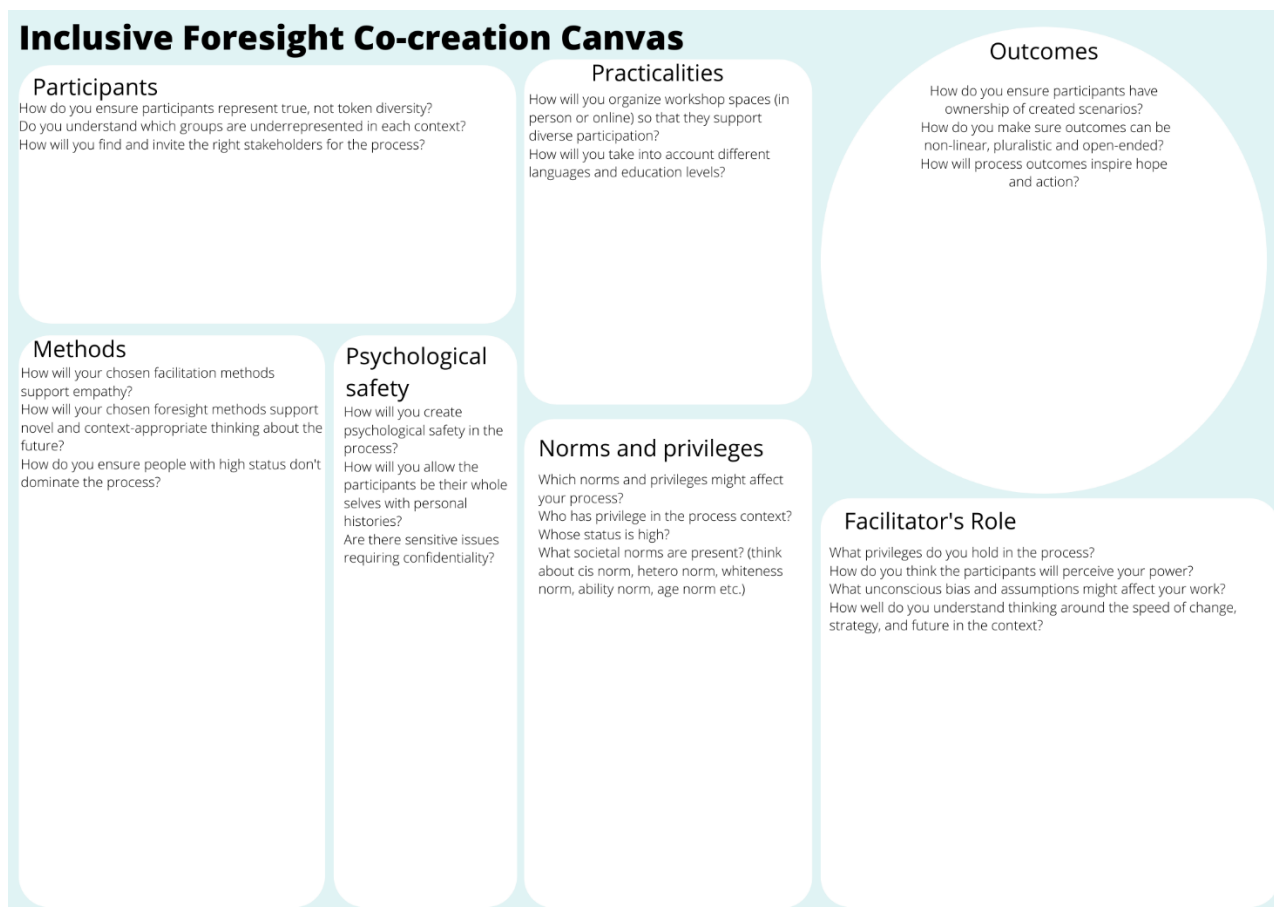
Inclusive Foresight Co-creation Canvas

Participants

How do you ensure participants represent true, not token diversity?
Do you understand which groups are underrepresented in each context?
How will you find and invite the right stakeholders for the process?

Practicalities

How will you organize workshop spaces (in person or online) so that they support diverse participation?
How will you take into account different languages and education levels?

Outcomes

How do you ensure participants have ownership of created scenarios?
How do you make sure outcomes can be non-linear, pluralistic and open-ended?
How will process outcomes inspire hope and action?

Methods

How will your chosen facilitation methods support empathy?
How will your chosen foresight methods support novel and context-appropriate thinking about the future?
How do you ensure people with high status don't dominate the process?

Psychological safety

How will you create psychological safety in the process?
How will you allow the participants be their whole selves with personal histories?
Are there sensitive issues requiring confidentiality?

Norms and privileges

Which norms and privileges might affect your process?
Who has privilege in the process context?
Whose status is high?
What societal norms are present? (think about cis norm, hetero norm, whiteness norm, ability norm, age norm etc.)

Facilitator's Role

What privileges do you hold in the process?
How do you think the participants will perceive your power?
What unconscious bias and assumptions might affect your work?
How well do you understand thinking around the speed of change, strategy, and future in the context?

Figure 15.Diverse and Inclusive Foresight Co-Creation Canvas.

The main factors influencing the design of the process are Participants, Methods, Practicalities, Psychological Safety, Norms and Privileges, Facilitator's role, and Outcomes. The Participants section involves thinking about who the process participants are. The questions in this section are related to how people can best be invited into the process and understanding which people may be part of an underrepresented group. The Methods section involves questions about which methods the facilitator will choose and how the methods will support different worldviews appropriate in the context and support equal participation. In the Practicalities section, the questions invite thinking about how practical arrangements like physical or online space and language translation support inclusive participation. Psychological Safety refers to practices that allow the participants to be their whole selves and present personal histories in the process. The Norms and Privileges section is essential for analyzing societal norms in the context and how the norms might affect the process as power relations for the participants. In Facilitator's Role, the facilitator is invited to become aware of their position in relation to the process participants and their own bias and privilege. The Outcomes section supports the process designer in thinking about how the created future scenarios will support an inclusive mindset.

5.1   Limitations of the Research and Development

This research and development project has been implemented in a short time frame and within a limited scope, which means that not necessarily all of the results are transferable or correct in other situations. The research design has been quite open since there has not been a conclusive decision on how the development results will be used in practice, which may have impacted the operability of the research and development results.

In the data collection phase, the number of interviewees was quite limited, and therefore, the interview data presented a limited view of the topic. Also, due to the nature of the topic, it would have been good if the interviewees had represented several different minority identities to gather data that represents different minority viewpoints. Having gathered data from some foresight process participants would have strengthened the research. Now all the data is from a process facilitator's point of view. The research and development process would have been strengthened if the research scope had been extended to the commissioning organization's current facilitation and foresight practices.

Due to time constraints, there was only one validation workshop with a limited number of participants. Ideally, the final Framework and Canvas would also have been validated by using them in an actual foresight co-creation process. If the Framework and Canvas were tested in a facilitation process, that would have given valuable feedback on their usability and if they produced the outcomes wished for.

One factor related to the topic is the possible bias or assumptions by the researcher. Unconscious bias is hard to realize, and it is possible that even with a conscious effort to reflect on own bias, some underlying assumptions or biases of the researcher may have affected this work. This thesis attempts to challenge dominant foresight methodologies to understand that there are different ways of comprehending and sensing the future – but since the author of this work is from the Global North, the framework is likely not entirely open to other worldviews.

5.2   Suggestions for Further Research and Implementing the Results

The commissioning organization plans to collect further feedback and test the created tools in actual foresight experiments carried out by cross-disciplinary groups working in different roles within the organization. These are not professionals but individuals interested in foresight who are also currently taking professional development courses in futures and foresight. Facilitation might be embedded in the foresight training curriculum of the organization in case the piloting results are positive. The commissioning organization plans to start the pilots for the tools with a project requiring external stakeholders' engagement in South-East Asia.

The commissioning organization expressed that the developed tools will be useful for them, especially regarding how the intersectional perspectives were incorporated into the work.

The Framework and Canvas provide a concrete tool for an organization interested in executing an inclusive foresight co-creation process. The framework and canvas provide inspiration and questions to use in a process design, allowing the process designer to implement crucial elements of inclusion in the process. Both tools are generic enough to be used by various organizations interested in working with foresight globally, in different countries and cultural contexts. The Framework and Canvas should be especially beneficial when the organization is unfamiliar with thinking about inclusion from a norm-critical or intersectional perspective. The Canvas has been created with the idea that it could be used as it is, without previous knowledge on inclusion and how inclusion can appear in a foresight process. Though, the facilitator who uses the Canvas should have some previous understanding of foresight and the concept of co-creation.

The Framework and Canvas should be validated with real users in an actual co-creation process, which would create an opportunity for further research to understand if the participants' experience of being included and having future scenarios that feel actionable is heightened. The Canvas could be tested for feedback and validation from process designers and facilitators. Both the Framework and Canvas would benefit from a testing process conducted in different kinds of contexts in order to understand if they support inclusive foresight process design in different contexts globally and especially in the countries where the commissioning organization operates.

The created Framework is not a foresight methodology per se but a Framework for designing a co-creative and inclusive process for foresight. There would be a need to develop specific methods for foresight that allow for inclusive outcomes. There should be different tools created for the different phases of the foresight process that would support inclusion in the process. For example, tools that would help with reflecting on norms and power structures in society in relation to the future could create a more inclusive process. More research and development could be conducted to understand which existing co-creation and foresight methods support inclusive and diverse futures scenarios and how the methods could be developed further.

6   Conclusion

This research and development project has explored inclusion in a co-creative foresight process design. The research result has developed a Framework for the Inclusive Co-Creation Process and the Inclusive Foresight Co-Creation Canvas. Both the Framework and the Canvas

present a way of designing a co-creative foresight process that can benefit various organizations interested in inclusive foresight co-creation. The Framework and the Canvas combine inclusive process design to create inclusive outcomes that support different worldviews and understanding of the future.

When a foresight process facilitator wants to embed inclusive thinking into the process, they should understand that providing an inclusive process does not necessarily produce outcomes, such as future scenarios, that have an inclusive mindset. Inclusion, especially when norm-critical and intersectional approaches are used, requires much reflection and unlearning from the process designer, facilitator, and participants. Reflecting on topics like power and privilege while simultaneously creating scenarios of alternative futures can be hard work. Designing the process carefully and reflecting on the problematic questions beforehand will support the inclusive aspects of the process.

The Framework attempts explicitly to support non-western worldviews and understanding of the future. In a global world and diverse organizations, there is a need to understand what inclusion can mean and how that can be implemented in design processes, engaging various perspectives and worldviews. This Framework can provide suggestions for developing a foresight process to challenge dominant foresight methodologies to open up to non-linear, open-ended, and multiple narratives about the future. The Framework invites thinking about the right participants, the suitable methods, and how to reflect on societal norms and power structures that impact co-creation and participation in a process.

As stated at the beginning of this thesis, the world is changing. Previously underrepresented groups in society are raising their voices and becoming acknowledged. The vices of the colonial past are understood to negatively impact many people, preventing them from being in touch with their past and, therefore, their future. The world needs tools that allow people to see a future they feel empowered to take action toward. An Inclusive Foresight Co-Creation process can create conditions in which people can feel hope and be inspired for a future that feels like theirs.

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Appendices

Appendix 1: Interview Quide

Interview Questions for Foresight methodology developers

Warm-up questions

1.   Please tell a little about yourself. What is your professional identity and what are you working on currently?

2.   Can you tell about your experiences with foresight co-creation processes in general?

3.   You have recently developed a process for foresight co-creation. Can you tell a little bit more about that. Why did you start with the project originally? How was the methodology developed? What stakeholder groups were involved in development? What experiences have you heard from those who have used the methodology to facilitate a foresight process?

Inclusive co-creation assets and privileges

4.   If you think participants, what makes it easy to participate in a foresight co-creation process in your experience? Are there some specific skills, qualities or circumstances that make it easy to participate fully?

5.   As a methodology developer for a foresight co-creation process, how do you try to make participation inclusive for everybody? How is inclusion taken into account in the methodology?

Challenges in inclusive co-creation

6.   What could make it difficult for a person to participate in a foresight co-creation process? Can you tell an example from your experience?

7.   Some common hinders in inclusive participation are listed below. When you look at the list, do you think these play a part in the foresight co-creation processes you have experience in? Can you talk more about how? Are there some other challenges or obstacles in your experience?

a.   Gender/ sexuality

b.   Class

c.   Education

d.   Age

e. Nationality/Ethnic group

f. Ability/Disability

g. Language

h. Religion

Visioning

8. How do you think UN Global Pulse should facilitate foresight co-creation processes in order to make them more inclusive for the participants?

9. When you think about inclusion in the emerging markets context, are there some specifics that should be taken into account in your opinion?

10. Is there anything you'd like to add concerning our theme?

Interview Questions for Co-creation experts in Emerging Markets context

Warm-up questions

1. Please tell a little about yourself. What is your professional identity and what are you working on currently?

2. Can you tell about your experiences with foresight and/ or co-creation processes in general?

3. Can you describe a recent co-creation or foresight process you have designed? What was the aim of the process? Who was participating? What was the design like? How did it succeed? What lessons learned do you take from that process?

Inclusive co-creation assets and privileges

4. If you think of participants, what makes it easy to participate in a foresight co-creation process in your experience? Are there some specific skills, qualities or circumstances that make it easy to be engaged fully?

5. As a designer for a foresight co-creation process, how do you try to make participation inclusive for everybody? How is inclusion taken into account in the methodology?

Challenges in inclusive co-creation

6.   What could make it difficult for a person to participate in a foresight co-creation process? Can you tell an example from your experience?

7.   Some common hinders in inclusive participation are listed below. When you look at the list, do you think these play a part in the foresight co-creation processes you have experience in? Can you talk more about how? Are there some other challenges or obstacles in your experience?

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g.   Language

h.   Religion

Visioning

8.   How do you think UN Global Pulse should facilitate foresight co-creation processes in order to make them more inclusive for the participants?

9.   When you think about inclusion in the emerging markets context, are there some specifics that should be taken into account in your opinion?

10.   Is there anything you'd like to add concerning our theme?