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Guiding Strategies For System Change with a Futures-Led, Human-Centred Design Approach

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Guiding Strategies For System Change with a Futures-Led, Human-Centred Design Approach

Enhancing systemic design with a mixed methodology applied in cross-sector case studies

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Futurice

RSD11 highlights the tension between the profound, long-term changes we need to be working towards, against the demand for immediately achievable actions. As industry practitioners, we regularly encounter clients prioritising short-term economic benefits from design processes and solutions over potential long-term social or environmental harms and an orientation towards avoiding risk, which can inhibit more profound paradigm-shifting work. This tension is growing as designers with a desire to have more environmentally, and socially positive impact is increasingly addressing complex, strategic challenges in a volatile, uncertain, complex and ambiguous (VUCA) 21st-century world (Giles, 2018).

Historically, human-centred designers have proven well-equipped to develop new organisational strategies and solve current challenges within a narrow problem space and short timeframe (Bade et al., 2015). However, they are often less equipped to overcome the aforementioned tensions and design more paradigm-shifting, longer-term organisational strategies that contribute to more profound change, including positive social and ecological impact.

The authors are designers and strategists working at Futurice, an established Nordic design, strategy and technology innovation agency with branches across Europe. In our work advising clients on strategy, they often struggle to consider longer time horizons and, consequently, a broader set of possibilities for the future.

Based on case studies from collaborations between Futurice and client organisations, this paper posits that designers can support organisations to more confidently address longer-term, systemic issues and increase their positive social and environmental impact by incorporating futures thinking and systemic practices. Focusing on two cases, we describe how we combined tools and methods from these methodologies with human-centred design to achieve this. We explain the approach we developed and applied across strategic projects, integrating learnings from collaborating with a range of organisations across the public, private and third sectors. We highlight how this approach has led organisations to better navigate a wider set of possibilities and include a more diverse set of stakeholder perspectives. Subsequently, developing more paradigm-shifting and regenerative future visions and strategies.

This paper offers strategic advice to support human-centred designers to co-create preferred futures. It shares learnings on how to co-design action plans to move organisations towards their preferred future with more alignment, adaptability and confidence. This approach has been developed based on testimonials and evaluations with the organisations we have worked with and the tangible impact this mixed methodology has had in informing their strategic plans.

KEYWORDS: human-centred design, service design, futures thinking, participatory futures, strategic foresight, systemic design, systemic practices, cross-sector, regenerative futures

RSD TOPIC(S): Cases & Practice, Methods & Methodology

Introduction

We live and work in an increasingly volatile, uncertain, complex and ambiguous (VUCA) world (Giles, 2018). The pace of change, and complexity of socio-technical systems, alongside the growing frequency of destabilising events, mean there is rising interest across many sectors to develop more long-term, adaptive strategic visions (Service Design Network, 2022). Strategies which will better respond to systemic challenges and equip organisations for this VUCA world.

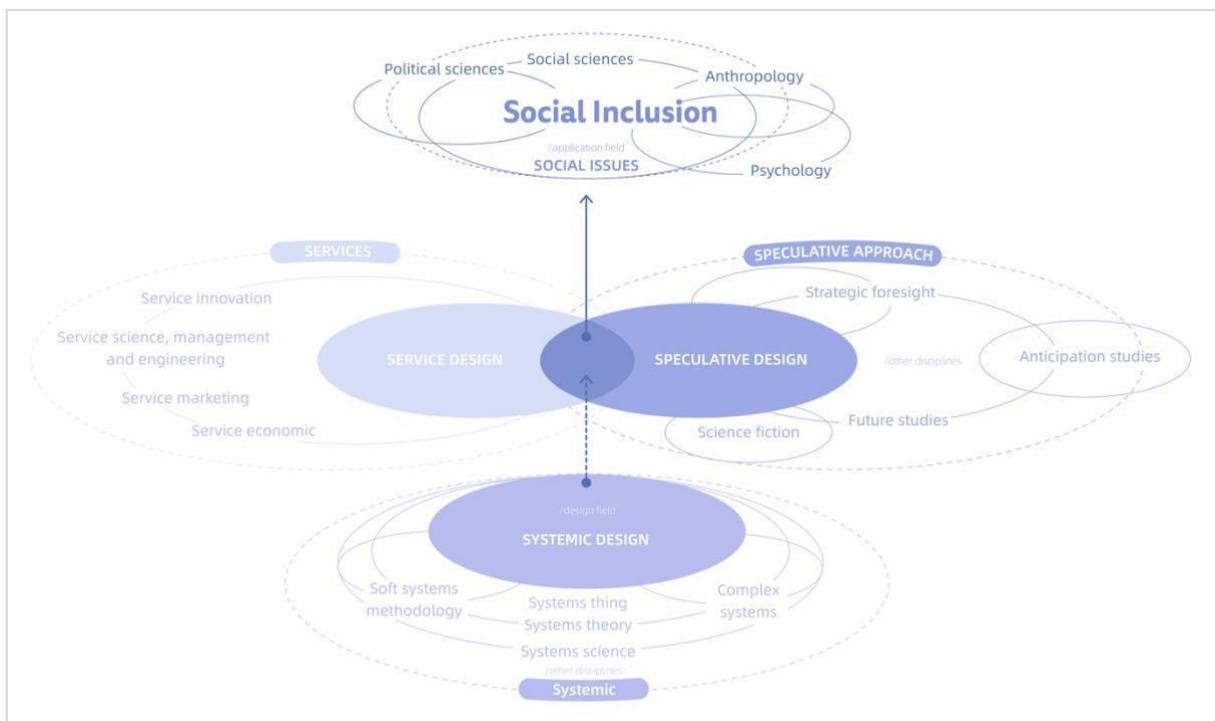
This paper shares insight into how human-centred designers can best respond to this shift by incorporating service design thinking and systemic practices into their service design and strategy work. The insight and related case studies outlined are synthesised from the authors' experience with Futurice clients, especially during collaborative projects they led between 2020 and 2022. In the cases highlighted, the clients partnering with Futurice had limited theoretical and practical experience with the methodologies discussed.

Key terms regularly used throughout:

- **Human-centred design** (HCD) puts real people at the centre of the development process, emphasising empathy as the source of inspiration for problem framing and intuitive solutions (Giacomin, 2014). It enables the design of purpose-built products and services for their user needs (IDEO, n.d.).
- **Service design** brings a holistic framework, collaborative tools and methods to help analyse problems, generate insight and ideas and choreograph the processes, technologies and interactions driving the delivery of services (service design Network, 2022).
- We define **futures** thinking as “any activity that helps us understand and make sense of possible future change or uncertainty about what might happen” (Government Office for Science, 2021).

- **Systems change** is the emergence of a new pattern of organisation or system structure, such as physical structure, flows, mindsets, paradigms or goals of a system (School of System Change, 2022). Systemic practices refer to multiple approaches and tools practitioners apply, considered “systemic,” i.e. grounded in systems thinking and contributing towards system change. (Birney, 2019)

There has been greater integration across systemic practices and human-centred design in recent years, especially service design. The potential of futures thinking to support critical thinking around complex social issues has been articulated and realised in practice (OECD, 2022), and Futurice has undertaken multiple successful futures projects. Nevertheless, the discourse and potential of integration across these approaches remain underexplored both in theory and practice (Lin, Sevaldson and Villari, 2021). Progressing this is key in developing the more long-term, adaptive strategic visions we have highlighted the need for in this paper.



Above: Illustration Mapping of Speculative Services. Highlights overlap of some disciplines under discussion. (Lin, Z., Villari, B., & Sevaldson, B., 2021).

Background and context

Futurice's mission is to co-create more sustainable and resilient futures. We partner with organisations to provide appropriate capability building, innovation processes and interdisciplinary expertise, as well as hands-on co-creative execution of research, design and delivery of products, services and strategies. As core organisational competencies, human-centred design and service design have typically been at the forefront of guiding strategic projects and laid the foundations of our process. By 2020, Futurice developed our service design thinking competencies and methodology for strategic work, for which there has been growing market demand (Antinranta A. et al., 2021). Our experience in systemic practices is growing as we have learned through action-based inquiry over the last two years how systems tools and methods can enrich our strategic work and increase impact.

We provide a brief overview of the multidisciplinary approaches we have been iterating towards a cohesive, joined-up methodology since 2020. Each falls under the taxonomic umbrella of either human-centred design, service design thinking or systemic practices:

- Strategic foresight (futures thinking): "A structured and systematic way of using ideas about the future to anticipate and better prepare for change." Involves the exploration of plausible futures, their potential opportunities and challenges. (OECD, n.d.)
- Participatory futures (futures thinking): A range of approaches for involving citizens in shaping the future. Encourages long-term thinking and influencing action in the present. Principles align with social justice and liberatory ethics with its focus on empowering traditionally marginalised, "subaltern and outlier perspectives" to "engender preferred futures." (Action Foresight, n.d.)
- Systemic design (systemic practices and human-centred design): Emphasises recognition of the "interconnected, complex nature of challenges and prioritising the planet as well as its people" (Design Council, 2021) and enables service and strategic designers to facilitate effective co-creation for complex systems and contextualise their work at a systems level (Jones & Van Ael, 2021).

What is the added value of uniting futures and systemic practices with human-centred design?

Historically, service designers have proven effective at solving challenges and developing new strategies within a narrow problem space and short timeframe (Bade, 2015). Despite this success, the field has been critiqued for a variety of reasons we will explore; additionally, we have experienced human-centred design approaches as inadequate at responding to the increasing client need for expansive, long-term and strategic visions. When applied to strategy, Human-centred design has often resulted in atomised, linear roadmaps that provide certainty and confidence but reinforce current paradigms and may be blind to the idea that a linear path forward cannot always be determined (Drew, 2021).

Services and business models are becoming more entangled within their wider system contexts, which atomising and individualistic design methods such as stakeholder and customer journey maps don't show (Jones & Van Ael, 2021). We have utilised System Change practices such as system mapping to mitigate this. The act of mapping alongside the visual output has helped clients process their organisation's entanglement in the broader ecosystem and identify leverage points for change. In a recent third-sector partnership, for instance, visualising flows of value exchange between different components on the map led to the clarification of mutually beneficial partnerships and aspirations to shift the dynamic. This, in turn, enabled additional ideas to arise about product and service development opportunities.

Integrating systemic practices has supported the type of adaptive leadership the service design field is increasingly acknowledging is necessary in order to design services that cross conventional ownership boundaries, are "situated within increasingly fragile systems" (Jones & Van Ael, 2021) and are entangled across complex, interconnected socio-political challenges. Moreover, it has been suggested that ultimately "the radical expansion of scope that systems thinking encourages will come to be required of service designers" (Neeley, 2021). This stance was reinforced by the launch of the Systemic Design Toolkit (n.d.) and the UK Design Council's Systemic Design Framework (2021). The dialogue underpinning the framework's launch highlighted the gaps in current human-centred design innovation frameworks (Drew, 2021).

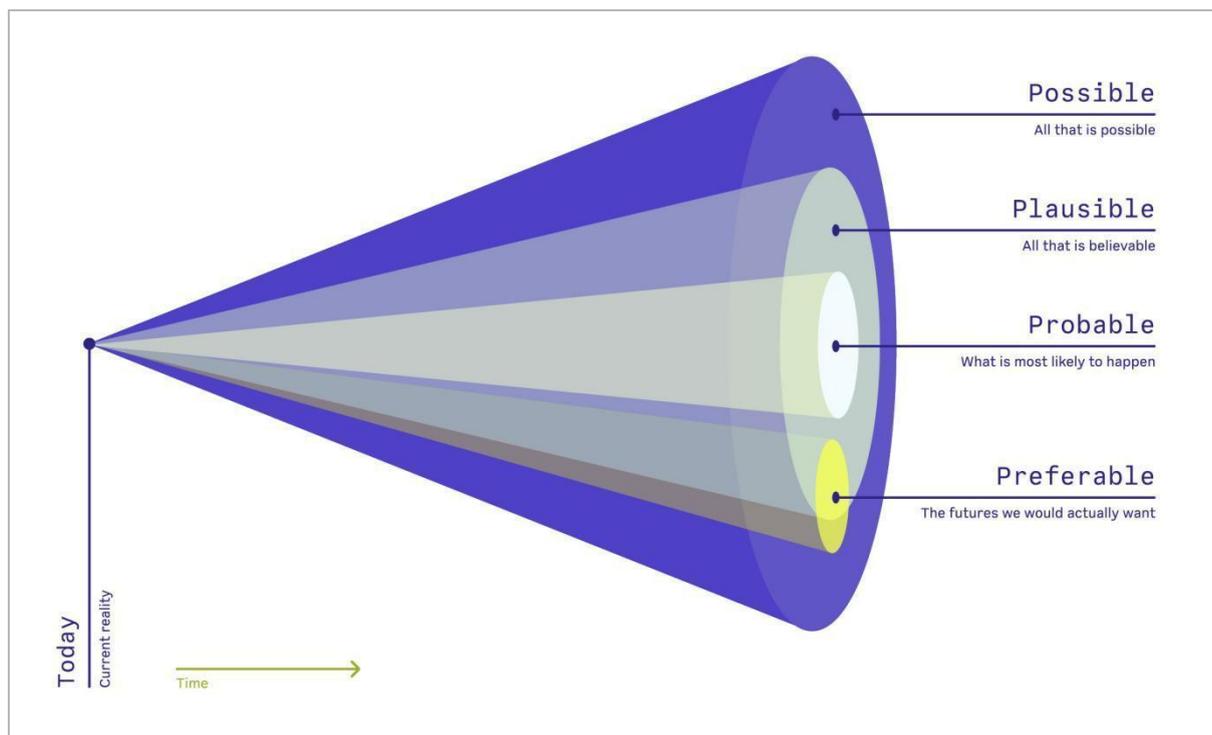
Much of the work of human-centred design practitioners in the Global North has been embedded within agile product teams who do not consider the impact that their work will have beyond the next few iterations. As a result, the tools and methods that have been developed for this work don't effectively support the consideration of more long-term strategic decision-making. One example is the typical focus on short-term strategy and the build, test and iteration of an initial product or service as quickly as possible. Research, testing and co-creation based on current user needs are central to the process. Generally, consideration of unintended consequences, society, and the environment are heavily deprioritised or discounted completely, compared to user needs, desirability, technical feasibility and cost. This is one of many potential examples highlighting why human-centred design has received strong critique since its inception for its individualism, centring on the most privileged and lack of sufficient focus on its broader social and environmental impact (Kejriwal et al., 2022). The conclusion has been that "design's professional practice still lacks methods and effective means of engagement with issues of oppression and inequity." (Meharry & Carey, 2021)

In our experience, futures thinking enables much more expanded timeframes, responding to the social and environmental impetus, as well as our partners' growing business need for this in a VUCA context. Its methodologies generate the psychologically safe, creative conditions to extend problem framing, imagination and visioning capabilities, as well as strategy and project objectives, to consider not only urgent challenges but years and decades ahead, even centuries and future generations. Subsequently, futures thinking combined with systemic practices has had the added value of supporting our work to be more equity-centred. The exploration of power differences and flows is embedded in systemic practice, whilst Participatory Futures involves citizens in shaping potential futures and "aims to democratise and encourage long-term thinking, and inform collective action in the present" (Peach et al., 2019). There is an emphasis in both on awareness of positionality, engaging diverse perspectives and shifting power asymmetries, enabling traditionally marginalised voices to have real influence in the process. In the context of design, this allows for a greater plurality of needs, experiences and/or preferred futures to emerge. In contrast to human-centred design, exploration and critique of current paradigms and mental models are embedded in the approach, directing change efforts more definitively

towards equity and justice. We have experienced these methodologies as an antidote to typical results of applying human-centred design, serving the neoliberal, capitalist paradigm of continuous growth and “product and service-selling” at the expense of the planet and humanity as a collective (Meharry and Carrey, 2021).

How we combine these methods in practice

Moving beyond the theory underlying our perspective, analysis of real-world client case studies in the following sections will elaborate on our practical experience and learnings. It will explore how human-centred designers can take a stronger leadership role in the development of longer-term strategic visions that are not only appropriate for more systemic issues within a complex VUCA context but also contribute to a more positive social and environmental impact.



Above: Illustration (Antinranta, A. et al., 2021), based on the Futures Cone (Voros, 2003), the Cone of Plausibility (Taylor, 1990) and Futures Cone model (1994, Hancock and Bezold).

The Futurice futures thinking approach developed in recent years has been documented within the open access Lean Futures Creation (LFC) toolkit (Antinranta, A. et al., 2021). It's grounded in futures theory and methods (see illustration and references above). This approach is outlined in four modules which are useful for framing the core steps in the upcoming case studies.

1. Scoping and horizon scanning: planning the purpose of the work and research, then scanning the environment for relevant changes, trends and weak signals.
2. Scenario building: selecting the key topics and investigating possible futures to create alternative scenarios.
3. Exploration and *provotyping* (provocative prototypes): building business-critical *What-if* questions and finding experimental ways to respond to them through evidence-based, co-designed speculative future scenarios based on primary and secondary research into weak signals (Boer et al., 2015)
4. Evaluation and road mapping: analysing findings, discovering the implications and planning ahead.

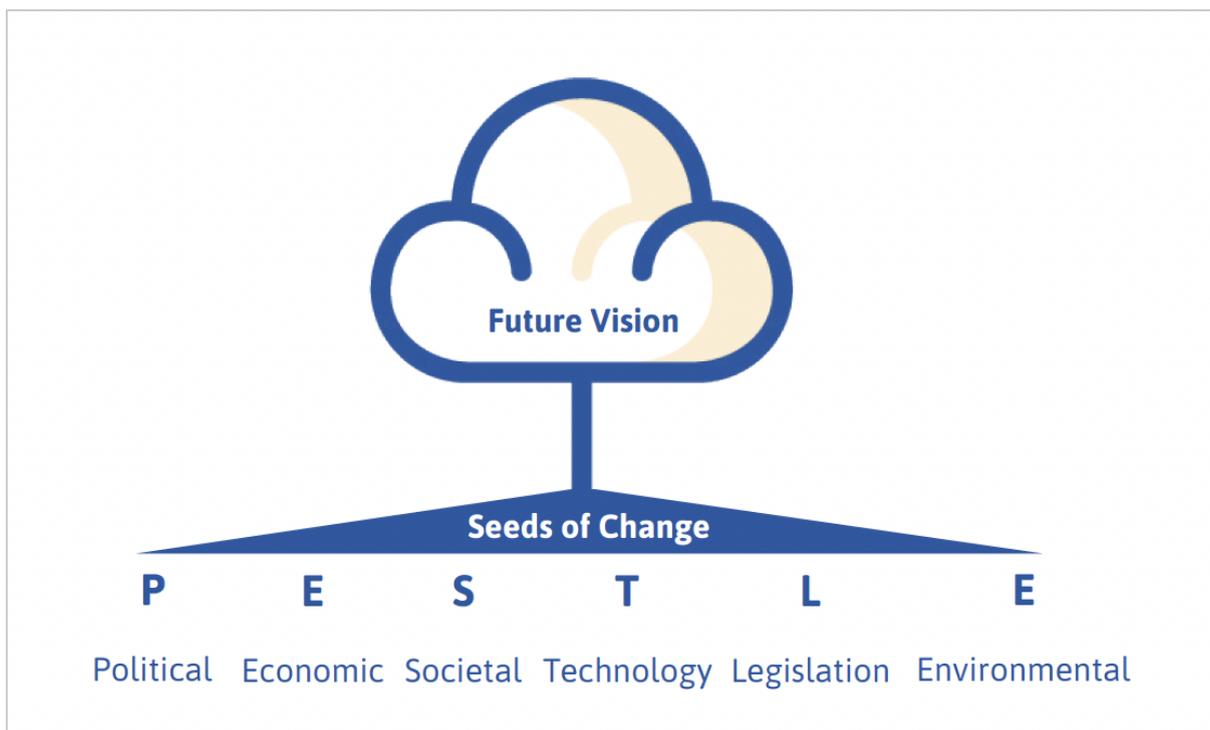


Above: The four Lean Futures Creation modules (Antinranta, A. et al., 2021).

The first three modules help during the problem exploration to expand our work beyond the current context and problem/opportunity space to consider a broader range of stakeholders and potential future contexts. Additionally, they provide the ability to explore a broader range of strategic implications. The utilisation of

human-centred design methods makes them approachable for human-centred designers expanding into Futures for the first time. For instance, during the first scoping and horizon scanning phase, we utilise in-depth interviews and affinity mapping (a technique to make sense of qualitative data on post-its) to analyse insight and identify weak signals from primary sources, alongside system mapping of the current state context and secondary futures research.

In this way, we move from defining problems in a narrow, current context to defining problems in a more systemic, holistic and multi-faceted future context, taking into consideration each of the PESTLE (political, ecological, social, technological, legal and environmental) perspectives rather than just individual human needs (Perera, 2017). This involves exploring and identifying common themes emerging across the multiple futures created and considering what the biggest opportunities and threats may be to humans, society and planet.



Above: Illustration of the PESTLE categories, how they inform seeds and future vision. (Illustration, Smith-Foster, 2021) (based on the PEST model, F, J. Aguilar., 1967).

Our process aligns closely with the scenario planning approach pioneered during the 1950s by the RAND Corporation in the US and attributed to Herman Kahn (Bradfield et al., 2005). By creating well-researched and evidence-based scenarios representing plausible futures, we elevate the discussion to one that is strategic and long-term, and by necessity, we consider more systemic complex issues. Thus reducing the problematic risk inherent in current practices - focusing only on solving the immediate, current time and state problem.

By creating a red thread from today to plausible future scenarios, we were able to keep stakeholders engaged and avoid scenarios being rejected as pure fiction. Scenarios are not only intended to depict a possible future but its unique values to enable organisations to consider their role and purpose within that. Organisations can determine not only what is most likely, but discuss what is most preferable and translate that into concrete strategic goals and actions to start building that future today through their business model, culture and services.

Co-designing future scenarios together with relevant stakeholders supports gauging the readiness for change of the key decision-makers. We discovered that challenging too much in terms of current mental models and plausibility of futures risks losing engagement. However, if we don't challenge enough, we lose the opportunity to help decision-makers be bold and creative in their thinking. For example, when working with a conservative organisation, we based the scenarios on extrapolations from their existing strategic plans; this helped them connect ideas to the futures more easily. Whereas with a community that had strong desires to fundamentally change the status quo, we were able to co-design a preferred scenario beyond 2030 that looked and felt completely different to the world they recognised today.

One key approach leads to the co-design of multiple scenarios that feel equally preferable by balancing positive and negative characteristics. This avoids creating dystopian or utopian scenarios, which can bias action towards the most utopian outcome without reflection on the range of possibilities. A useful tip is to identify a potentially positive and negative viewpoint or implication for every characteristic within the scenario. This contrasts with a typical human-centred design approach in terms of the time and effort required to consider different components of the scenario design.

For instance, many additional scales, from micro, individual experiences to the macro socio-political world context. Additionally, it is challenging for project participants to own the idea that there may be no clear solution or end-point where the problem is solved. The onus is on considering how the challenge may have evolved over time-based on ambiguous influencing factors and how this could impact society, organisation, culture, business, community or customers. We play a key role in helping participants to shift from a reactive to a proactive mindset, living into the realisation that their community or organisation has some agency, choice and influence over the future.

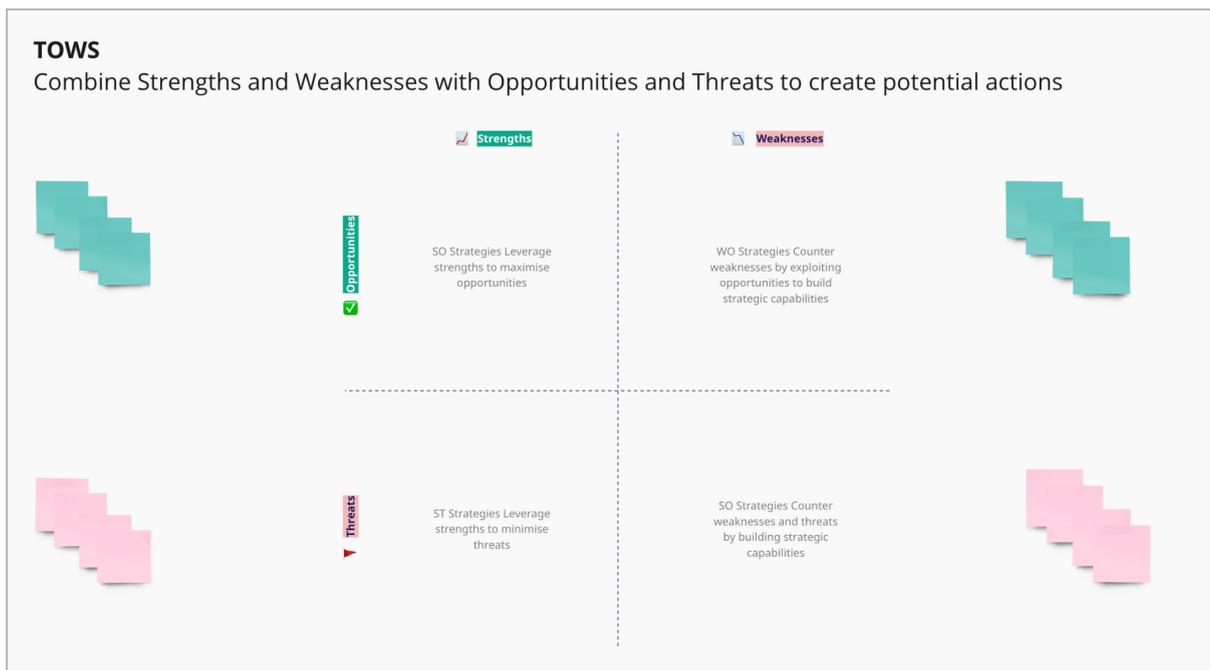
As the work moves from problems and opportunities to ideation and solution design in phases 3-4, we find a nice fit with service design. This is because scenarios, often represented through stories or visualisations, can be translated into business-critical *What if* or *How might we?* questions—a format service designers are familiar with as a prompt for generative thinking (Stickdorn, 2022). Combining these types of questions with identified challenges supports reframing. Identified opportunity areas can then be prioritised and explored with impacted people through prototypes in a way comparable to user-testing with prototypes. However, the focus of testing sits further upstream, for instance, exploring high-level concepts, different organisational cultures and values or business models that may not be feasible today but could be in future.

Prior to diving into phase 3, Exploration and Prototyping, it's important to lay the foundations for building appropriate scenarios as these have an outsized influence on the resulting strategy. Depending on the industry and sector, we often decide to take one of two paths as our next step:

1. Rehearsing for multiple futures—commercial approach

With more commercial, technological or evidence-oriented partners, we often follow scenario planning conventions; a great example of this is the work we did with a UK-based rail operator who was looking to define its digital strategy alongside building rail infrastructure that won't be operational for 5-10 years (Mitchell, 2022). This involved rehearsing potential actions against the range of future scenarios to pinpoint which offer strategic options that align with the organisation's vision and values, as well as demonstrate the most robust response across all or most of the scenarios created.

The starting point is a deeper analysis of the current organisation and, using a SWOT (strengths, weaknesses, opportunities, and threats) type analysis, critically assessing the organisation's strengths and weaknesses from a strategic perspective (Gürel, 2017). We explore and discuss the potential opportunities and threats each scenario presents to the organisation. Next, we use the TOWS (Threats, Opportunities, Weaknesses and Strengths) method to generate lots of ideas, which could be combined with other ideation methods to increase creativity (Wehrich, 1982). With the TOWS approach, each strength and weakness is systematically paired with each opportunity and threat identified to consider what it could lead to in terms of exploiting strengths or developing responses to existing weaknesses. This culminates in a lot of ideas and potential actions for each scenario.



Above: TOWS digital workshop board in Miro. (Illustration Futurice, 2022), (TOWS approach, Wehrich, 1982).

To turn this into strategic actions, it's important to look across all the ideas generated for themes and commonalities. Now we're at the point of rehearsing these as strategic options for the organisation, and this involves assessing them in two ways: Firstly, do they align with the organisation's vision and values? Secondly, how well does each idea work as a response for all the scenarios? Each idea can then be scored and ranked to help consider whether it provides a good option for the organisation to take forwards.

Following this approach provides leaders with a level of rigour and analysis which often leads to support from risk-averse stakeholders seeking evidence-based recommendations and plans. It is worth noting that this process can be resource-intensive and, to be done robustly, needs a significant amount of time and resource commitment to ensure the quality of output.

2. Co-designing a preferred future—community-led approach

In non-profit, community and activist settings, we may take a different approach, and work towards one united plausible future vision which integrates plural preferred scenarios, so it articulates the range of values and long-term aspirations of the project participants.

Co-designing one future vision or scenario offers the benefit of a North Star that communities can align around and orient towards across disparate organisations. This catalyses goal setting, focused collaboration and action across an ecosystem in ways multiple scenarios might not. However, it's critical to work with diverse points of view on the future in order to engage in the plurality of future possibilities that fall along the spectrum of "probable, possible, plausible, and, most importantly, desirable" (Bielskyte, 2021). Centring traditionally excluded points of view in visioning work is more likely to lead to a more just, inclusive and cohesive pluriverse or "world where many worlds fit" (Escobar, 2020, P.9) vision manifesting, as opposed to a restrictive scenario which only works for the dominant groups, and perpetuates harm causing paradigms.

This was the approach we took for the award-winning Voluntary Sector Futures project (Castle et al., 2021), an innovative, nationwide visioning initiative we facilitated with the voluntary sector in Wales alongside our partner, the Wales Council for Voluntary Action (WCVA).



Above: Illustration of vision for Wales 2030. (Future Generations Commissioner for Wales & Futurice, 2021).

In 2021 WCVA wanted to identify how voluntary organisations in Wales could shape a thriving future through the COVID-19 recovery. Over 100 representatives from the voluntary sector, Third Sector Support Wales (TSSW), Future Generations Commissioner, the public and private sector and the Welsh Government participated. The five-month collaboration informed WCVA and TSSW's five-year strategic review, resulted in collective goals and actions, and one guiding vision that represented participants' ideal society beyond 2030 to work towards together - a just, green and community-oriented Wales.

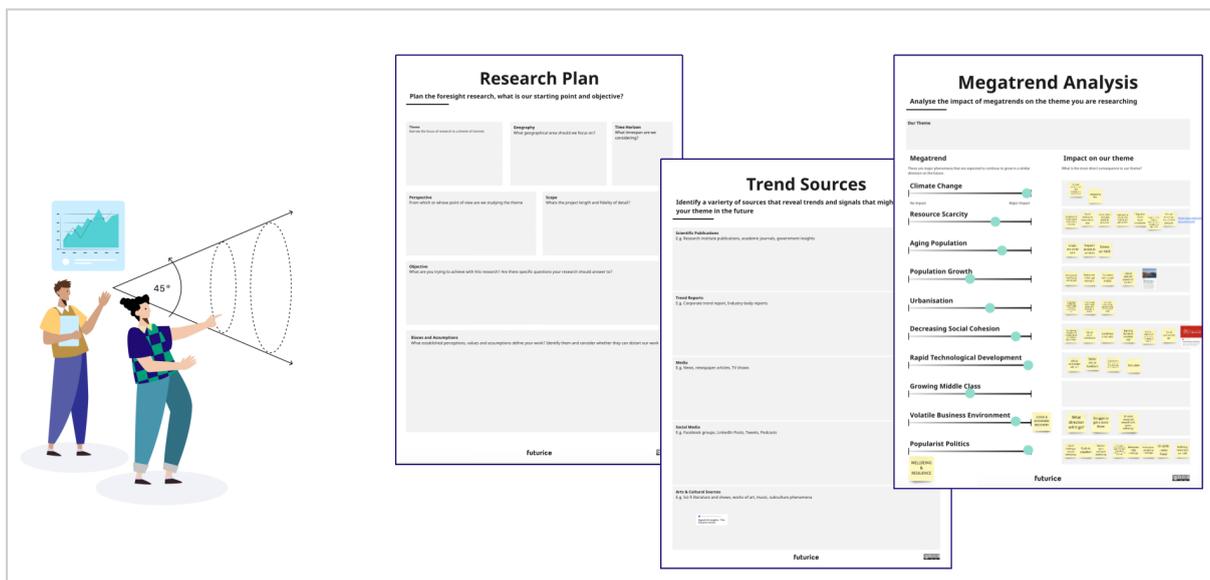


Above: Excerpts from the Voluntary Sector Futures public report, available online in English and Welsh (Illustration, Smith-Foster, 2022).

When the project began in 2021, the voluntary sector was still reeling from responding to crises exacerbated by the pandemic. WCVA and partners felt their organisations were on shaky ground, which undermined the courage required to envision a better future. Our challenge was to facilitate a psychologically safe, inclusive process that would empower participants to unleash more hopeful and radical visions for the long term that would provide a sense of agency over the future. Therefore, an ongoing systemic inquiry into power dynamics in order to formulate appropriate strategies to work with power differences and mitigate asymmetries was integral to the work (Birney, 2021). For example, as a national umbrella body channelling government funding, there was a large power difference between WCVA and grassroots community organisations who described facing barriers to accessing funding. One of the critical balancing acts was to communicate lived experience through a mix of secondary insight and face-to-face co-creation sessions, mediating a shared space with care, consideration and

appropriate protocols in place. Moments of tension arose as people with very different perspectives and positionalities exchanged views, sometimes for the first time.

A series of workshops involving 15-20 cross-sector participants, combined with smaller sessions with key decision-makers, took place regularly throughout to progress the work. This built trust, accountability, commitment and a sense of ownership of the future visions and strategic actions across a broad ecosystem.



Above: Snapshot of a few of the collaborative digital templates used from the Lean Futures Creation Toolkit to undertake scoping and horizon scanning (Illustrations, Futureice, Antinranta, A. et al., 2021).

The project began by exploring how different futures may emerge using horizon scanning. In co-creation sessions, we extrapolated an expansive set of potential positive slices of the future or *seeds of change* to promote discussion around underlying values and dreams emerging from the implications of different seeds.

A set of 54 seeds of change was generated from the secondary research and collaborative workshops. These statements provide insight into potential, preferred

and positive futures based on participant input and innovative initiatives in Wales. The seeds of change are accessible as a commons via a public report for anyone to use. These create a springboard to support more visioning and actions that will positively impact the future.

Seed title	Description	Sources and references
<p data-bbox="204 667 375 728">Grassroots led strategies</p> 	<p data-bbox="438 667 1109 779">Grassroots organisations are highly valued for their close connection with different communities' needs. They form a bridge connecting larger institutions or voluntary organisations with people on the ground.</p> <p data-bbox="438 790 1117 902">There is high mutual trust and key decisions are made in partnership. This ensures diverse points of view are involved and influential right from the start of discussion or strategic planning.</p>	<ul style="list-style-type: none"> <li data-bbox="1173 689 1284 712">• Workshop input <li data-bbox="1173 723 1390 779">• NWAMI/The CCE (Networking for World Awareness of Multicultural Integration) <li data-bbox="1173 790 1332 824">• NYCA (Newport Yemeni Community Association) <li data-bbox="1173 835 1398 869">• EYST (Ethnic Minorities and Youth Support Team) <li data-bbox="1173 880 1316 902">• Race Council Cymru

Above: Example seed of change from the project. (Castle et al., 2021).

A key challenge in this first phase was ensuring diverse and equitable participation. We underestimated the time it took to build connections, trust and inclusive networks. A key learning to take forward as human-centred designers work more systematically across multi-agency partnerships is the need for analysis and weaving of different networks.

The next activities built on this by engaging stakeholders to explore how seeds might grow over time towards 2030 and create positive impact. This involved extracting outputs from generative, co-creative ideation sessions and then clustering these into themes and an overall articulation of the world they described. The end result was a variety of inspiring, co-created future impacts which provide a rich source of insight into the potential futures that the sector wants.

Mapping the current system highlighted value flows and barriers between key organisations, especially grassroots voluntary organisations. Critically, leverage points and blockers to systemic change were made visible, enabling discussion and perception

shifts about the best role for WCVA to take in the system and how that might need to shift in future in order to support the aspirations of the sector.

Due to the depth of representative participation not previously achieved, surprising new insights and perspectives on the current system were gained by power holders. The client reflected that this was a demanding project, emotionally and in terms of commitments going forward. Key learning from this process: it took time for key decision-makers to internalise and accept the requests from membership and staff. Since the project, we have further improved our support protocols for anticipating power differences, tensions and vulnerabilities that may arise with appropriate care.

As the future scenarios developed towards one more detailed and cohesive whole covering all angles of the PESTLE model, the process inspired new thinking about ways for the voluntary sector to work together and with other sectors beyond the status quo, as well as creating a shared sense of purpose and collective commitment to transformative action. For instance, opportunities for the sector to become a key partner advising the government and the Future Generations Commissioner, as well as taking a leadership role in redefining success in terms of social impact and wellbeing measures at a national level instead of GDP and growth (Castle et al., 2021).

The final participatory activity involved collaborating on a futures thinking method called the three horizons, which involved co-designing a roadmap of actions that formed a bridge between the present and the preferred future (Sharpe, 2019). For those new to integrating systemic practices and futures methods, this is one of the best activities to experiment with, and it works very well in group settings, as it supports participants to create their own red thread between the future, the present and how to get there.

This was followed by a set of internal activities by WCVA and TSSW, which used all the co-designed outputs to inform an action plan for WCVA and TSSW that framed their role, goals and theory of change. A series of collaborative planning workshops were undertaken to additionally consider what actions and goals these organisations could take to support the whole sector. This work has directed the wider strategic planning both WCVA and TSSW are currently undertaking. It's critical not to miss this stage, as these action-oriented steps are what transform scenarios into clear steps and adaptive

leadership, as they create a sense of shared ownership and responsibility around implementation, and critically from a system change perspective, willingness to adapt to emergent challenges.



Above: Summary of Voluntary Sector articulation of areas they want to take action (Illustration, Smith-Foster, 2022) (Content, Castle et al., 2021).

Evaluating impact

We designed an evaluation framework based on the system change and deep equity model of Sheryl Petty and Mark Leach (2020) because it enabled us to analyse multiple levels - from individual and interpersonal to organisational, strategic and systemic. Contributions to change from WCVA's perspective one year from the project beginning included:

- Individual: The work gave people in WCVA on all levels a chance to reflect, process and feel the impact of the pandemic. By working in a transparent and participatory way, not only did key decision-makers gain confidence and buy-in to the final vision they were also held accountable to commit to integrating it into the organisational strategy.
- Interpersonal: Holding space for listening increased mutual learning and transparency. The approach encouraged cultural shifts within the client and partners, such as greater integration of members' wishes, more democratic processes, better listening, increased creativity and mutual learning.
- Organisational and strategic: There has been a shift in the power balance at WCVA linked to the quality of listening, which nudged mental models about member relations. WCVA is really taking on board what members value and what they want to be changed, evidenced by the futures work directly feeding into and shaping WCVA and TSSW strategic goals and actions.
- Systemic: Problems and blockers to systemic change were made visible. The process as a whole supported a strategic refresh and more positive reception of the WCVA & TSSW strategies at a national level because the voluntary sector saw their values and aspirations represented.

The client was delighted that all 20 County Voluntary Councils across Wales agreed on the new five-year strategy more rapidly than in the past because it truly represented their aspirations. This was critical for achieving the intended local and national alignment, commitment and impact. To conclude, the approach resulted in relationship building, strengthened and new networks for change and cultural shifts within the client and partners that will have a lasting positive impact in and beyond the organisation.

Conclusion

Reflections on combining futures thinking and systemic practices with human-centred design methodologies

We still have process development to do so as to orient towards equity, justice and broader social and environmental impact across every project consistently and meaningfully. Nevertheless, so far on the journey of enhancing our approach, we have found this mixed methodology provides a more appropriate toolkit for addressing complex, systemic challenges. It supports the facilitation of a process which is more rigorous in considering longer-term challenges, opportunities and implications, resulting in a strategy better able to prepare organisations for an increasingly VUCA future whilst addressing the challenges of today.

A key takeaway is the many benefits of co-designing future scenarios and strategy with the people who will be most impacted, including traditionally marginalised perspectives beyond leadership positions. Previously unheard insights are gained on the current system by clients, supporting them to rethink and reframe, subsequently opening up new possibilities. Additionally, more progressive ideas about the future are incorporated, making the future scenario/s more creative, resilient and divergent compared to business-as-usual scenarios.

Visioning led people and organisations to reflect on their purpose, societal role and values. This approach generates a safe space to challenge cultural norms and support a strategic level reset around shared values that surface in future scenarios. Working transparently and collaboratively with multiple cross-sector organisations increased the project's potential to impact the system at a national level, disseminating ownership and commitment.

Crucially, when it comes to the question of how to increase the positive social and environmental impact of human-centred design within a VUCA context, applying this mixed methodology to strategic visioning is one answer. Since environmental implications are usually locally invisible and longer term, they are often under-indexed by current human-centred design approaches. Envisioning future scenarios that show the trajectory of environmental decline, involving a broader set of stakeholders and

creating space for both complexity and radical imagination means there is an easier route to bring in nature, the climate and future generations. They can be creatively represented with a stake in the scenarios and organisational vision.

To conclude, we have outlined how the long-term framing and imagination-expanding methods of futures thinking and systemic practices can complement and add value to human-centred design. By incorporating these approaches, we have found that the buy-in, willingness to create change and capacity to deal with ambiguity, as well as longer-term use and impact of this type of work, can be significant long after the designers have left the building.

References

1. Action Foresight. (n.d.) Global Swarm. Action Foresight website.
<https://actionforesight.net/global-swarm/>
2. Aguilar, F, J. (1967, January 1). Scanning the Business Environment. Collier-Macmillan
3. Antinranta, A., Hamann, A., Kaeppler, P., Messmer, S., Muurimäki, M., Rainio, I., & Trudgen R. (2021, March 1), The Lean Futures Creation Handbook, Version 2.0: A collaborative method toolkit for futures thinking and creation. Futurice.
<https://futurice.com/lean-futures-creation-toolkit>
4. Antinranta, A., Hamann, A., Kaeppler, P., Messmer, S., Muurimäki, M., Rainio, I., & Trudgen R. (2021, March 1). Futures Cone: identifying possible and preferable futures by Futurice. [Illustration]. Futurice.
<https://futurice.com/lean-futures-creation-toolkit>
5. Antinranta, A., Hamann, A., Kaeppler, P., Messmer, S., Muurimäki, M., Rainio, I., & Trudgen R. (2021, March 1). The four Lean Futures Creation modules. [Illustration]. Futurice. <https://futurice.com/lean-futures-creation-toolkit>
6. Bade, J., Brest, P., & Roumani, N. (2015, October 19). Problem Solving, Human-Centered Design, and Strategic Processes. Stanford Pacs Center on Philanthropy and Civil Society.
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjyoXbvfj4AhW4QkEAHW4GADAQFnoECEMQAQ&url=https%3A%2F%2Fpacs>

- center.stanford.edu/wp-content/uploads/2015/09/Download-the-full-article-here.pdf&usg=AOvVaw38-JkannSAcm50YP1YJV_1
7. Ball, J. (2019, October 1). The Double Diamond: A universally accepted depiction of the design process. Design Council.
<https://www.designcouncil.org.uk/our-work/news-opinion/double-diamond-universally-accepted-depiction-design-process>
 8. Bielskyte, M. (2021, May 18). Protopia Futures Framework. Medium: Protopia Futures.
<https://medium.com/protopia-futures/protopia-futures-framework-f3c2a5d09a1e>
 9. Birney, A. (2021, January 20). Power dynamics: A systemic inquiry. Medium: School of system Change.
<https://medium.com/school-of-system-change/power-dynamics-a-systemic-inquiry-c30e2e658d3e>
 10. Birney, A. (2019, October 4). Systems practices - what might these be? Medium: School of system Change.
<https://medium.com/school-of-system-change/systems-practices-what-might-these-be-ff998d6b15a3>
 11. Boer, L., Buur, J., Donovan, J., Gunn, W., & Pedersen, J. (2015, November). Provotypes are Provocative Prototypes. ResearchGate.
https://www.researchgate.net/publication/283792668_Provotypes_are_Provocative_Prototypes
 12. Bradfield, R. Burt, G., Cairns, G., Van Der Heijden, K., & Wright, G. (2005, May 25). The origins and evolution of scenario techniques in long range business planning. (pp. 795-812). Futures, Volume 37, Issue 8. ScienceDirect.
<https://www.sciencedirect.com/science/article/abs/pii/S0016328705000042>
 13. Castle, T., Iuppa, S., Nicholl, A., & Smith-Foster, E. (2021, September). Voluntary Sector Futures. Cardiff, Wales: Wales Council for Voluntary Action.
https://f.hubspotusercontent30.net/hubfs/6703033/WCVA%20Voluntary%20Futures%20Report/English_lang_Public_Report_Voluntary_Sector_Futures_WCVAXFuture.pdf

14. Castle, T., Iuppa, S., Nicholl, A., & Smith-Foster, E. (2021, September). Voluntary Sector Futures. Cardiff, Wales: Wales Council for Voluntary Action. [Illustration] https://drive.google.com/file/d/1_M09xexZw_e9-EFe_0Wg-Eyl9D6awRPb/view
15. Castle, T. & Smith-Foster, E. (2022, June 28). Notable, Speculative Design Award, Core77 Design Awards 2022. Voluntary Sector Futures. Core 77. <https://designawards.core77.com/speculative-design/114973/Voluntary-Sector-Futures>
16. Castle, T. & Smith-Foster, E. (2022, June 28). Excerpts from the Voluntary Sector Futures public report launched 2022, available online in English and Welsh. [Illustration] Core 77. <https://designawards.core77.com/speculative-design/114973/Voluntary-Sector-Futures>
17. Carey, H. and Meharry, J. (2021). Designing against oppression A conceptual framework for an anti-oppressive design praxis. Proceedings of the Relating Systems Thinking and Design (RSD10) Symposium. <https://rdsymposium.org/designing-against-oppression-a-conceptual-framework-for-an-anti-oppressive-design-praxis/>
18. Design Council. (2021, April 22). Beyond Net Zero: A Systemic Design Approach. Design Council site. <https://www.designcouncil.org.uk/our-work/skills-learning/tools-frameworks/beyond-net-zero-a-systemic-design-approach/>
19. Drew, C. (2021, April 27). Developing our new Systemic Design Framework. Medium: Design Council. <https://medium.com/design-council/developing-our-new-systemic-design-framework-e0f74fe118f7>
20. Escobar, A. (2020, April 24). Pluriversal Politics: The Real and the Possible. (232 pp., p.9). Durham and London: Duke University Press. Translation by David Frye.
21. Giacomini, J. (2014). What is human centred design? Design Journal, 17(4): 606 - 623, Taylor & Francis. <http://bura.brunel.ac.uk/handle/2438/11408>
22. Giles, S. (2018, May 9). How VUCA Is Reshaping The Business Environment, And What It Means For Innovation. Forbes. <https://www.forbes.com/sites/sunniegiles/2018/05/09/how-vuca-is-reshaping-the-business-environment-and-what-it-means-for-innovation/?sh=440188bfeb8d>

23. Government Office for Science. (2021, February 25). A brief guide to futures thinking and foresight. Government Office for Science, Gov.uk.
<https://www.gov.uk/government/publications/futures-thinking-and-foresight-a-brief-guide>
24. Gürel, E. (2017, August). SWOT Analysis: A Theoretical Review. Journal of International Social Research. ResearchGate.
https://www.researchgate.net/publication/319367788_SWOT_ANALYSIS_A_THEORETICAL_REVIEW
25. Hancock, T. And Bezold, C. (1994). Possible futures, preferable futures. Health Forum Journal Mar-Apr;37(2):23-9. National Library for Public Medicine. PubMed.gov <https://pubmed.ncbi.nlm.nih.gov/10132155/>
26. IDEO. (n.d.). What's the difference between human-centered design and design thinking? IDEO Design Thinking.
<https://designthinking.ideo.com/faq/whats-the-difference-between-human-centered-design-and-design-thinking>
27. Iuppa, S., & Smith-Foster, E. (2022, January 1). Dychmygu Dyfodol... Imagining Futures. WCVA. <https://wcva.cymru/dychmygu-dyfodol-imagining-futures/>
28. Jones, P., & Van Ael, K. (2021, April 19). Design for Services in Complex System Contexts: Introducing the Systemic Design Toolkit. Touchpoint Journal of International Service Design, Vol. 12 No. 2. Service Design Network.
<https://www.service-design-network.org/touchpoint/service-design-and-systems-thinking/design-for-services-in-complex-system-contexts-introducing-the-systemic-design-toolkit>
29. Kejriwal, G., Marsden, A. (2022, April 13). For people and planet: moving beyond human-centred design. Nesta.
<https://www.nesta.org.uk/blog/for-people-and-planet-moving-beyond-human-centred-design/>
30. Landry, L. (2020, December 15). What is Human-centred Design? Harvard Business School Online.
<https://online.hbs.edu/blog/post/what-is-human-centered-design>
31. Lin, Z., Villari, B., & Sevaldson, B. (2021). Towards speculative services for an inclusive society: Understanding the relationships between Systemic-, Service- and Speculative Design. [Illustration]. Proceedings of the Relating Systems

- Thinking and Design (RSD10) Symposium.
<https://rsdsymposium.org/towards-speculative-services/>
32. Mitchell, D. (n.d.). What might the future of rail look like? Futurice.
<https://futurice.com/case-studies/east-west-railway-company>
33. Neeley, J,P. (2021, April 19). Consider Everything: Aligning service design practice with our complex reality. Touchpoint Journal of International Service Design, Vol. 12 No. 2. Service Design Network.
<https://www.service-design-network.org/touchpoint/service-design-and-systems-thinking/consider-everything>
34. OECD, (n.d.) Strategic Foresight. OECD site.
<https://www.oecd.org/strategic-foresight/whatisforesight/>
35. Perera, R. (2017, September 19). The PESTLE Analysis. Second edition. Nerdynaut.
https://books.google.co.uk/books/about/The_PESTLE_Analysis.html?id=ZWpLDwAAQBAJ&redir_esc=y
36. Peach, K., Ramos, J., Smith, L. & Sweeney, J. A. (2019, November 11). Our futures: by the people, for the people. How mass involvement in shaping the future can solve complex problems. P.15.
https://www.nesta.org.uk/documents/1692/Our_futures_by_the_people_for_the_people_WEB_v5.pdf
37. Petty, S. & Leach, M. (2020). Systems Change & Deep Equity: Pathways Toward Sustainable Impact, Beyond “Eureka!,” Unawareness & Unwitting Harm. An Interview with Sheryl Petty. Change Elemental.
<https://changeelemental.org/resources/systems-change-and-deep-equity-monograph/>
38. School of System Change, (n.d.) System change for sustainability. School of System Change site.
<https://www.forumforthefuture.org/navigating-system-change>
39. Service Design Network. (2021, April). Service Design and Systems Thinking.
<https://www.service-design-network.org/touchpoint/service-design-and-systems-thinking>
40. Service Design Network (SDN). (n.d.). What is Service Design?
<https://www.service-design-network.org/about-service-design>

41. Smith-Foster, E. (2022, January 26) Voluntary Sector Futures: System-shifting Co-design in Wales. Futurice, System Change Finland. [Illustration].
https://drive.google.com/file/d/1_M09xexZw_e9-EFe_0Wg-Eyl9D6awRPb/view
42. Stickdorn, M. (n.d.). "How might we ...?" questions from insights and user stories. THIS IS SERVICE DESIGN DOING website.
<https://www.thisisservicedesigndoing.com/methods/how-might-we-questions-from-insights-and-user-stories>
43. Taylor, C, W. (1990, February 8). Creating Strategic Visions. Strategic Studies Institute, U.S. Army War College.
https://s3-eu-west-1.amazonaws.com/goalatlus.marketing/uploads/2021/04/Charles_Taylor_Creating_Strategic_Visions.pdf
44. Voros, J. (2003, January 6). A generic foresight process framework. Foresight Vol. 5, Issue 3, P. 10-21. Researchgate. MCB UP Ltd.
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=I07FULAAAAJ&citation_for_view=I07FULAAAAJ:d1gkVwhDpl0C
45. Wehrich, H. (1982, April). The TOWS matrix—A tool for situational analysis. Long range planning, 15(2), (pp. 54-66). Long range Planning, Volume 15, Issue 2. ScienceDirect.
<https://www.sciencedirect.com/science/article/abs/pii/0024630182901200>