FINLAND FUTURES RESEARCH CENTRE • UNIVERSITY OF TURKU

EXPLORING SOCIO-TECHNICAL FUTURES OF WORK: A NARRATIVE-BASED FORESIGHT APPROACH

Report of the Millennium Project Session at the Futures of Technologies Conference 2025

Mara Di Berardo, Sirkka Heinonen, Amos Taylor, Riku Viitamäki & Veli Virmajoki

FFRC eBooks 4/2025

Funded by the European Union
NextGenerationEU

Research Council of Finland

T-WINNING SPACES 2035

The Millennium Project
GLOBAL FUTURES STUDIES & RESEARCH

FINLAND FUTURES RESEARCH CENTRE

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ISBN 978-952-249-628-7 (pdf) • ISBN 978-952-249-629-4 (print) • ISSN 1797-1322

Available online at https://urn.fi/URN:ISBN:978-952-249-628-7

Cover photos (front & back): Mural *"Your sky"* by Millo (Francesco Camillo Giorgino), located in Aielli, Abruzzo, Italy. The work extends across all the four façades of the building, creating an effect of continuity and "infinity" (see the video www.facebook.com/reel/653432387260161). It depicts a young girl gently lifting the veil of the city to reveal the sky and its infinite possibilities, inviting us to rediscover the depth of the universe beyond the surface of everyday life. Alternatively, the work can be interpreted as children speaking to adults, reminding them of their responsibility to leave behind a more livable and honest world. The boy on the other side of the building. Photos by Mara di Berardo.

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"In order to change an existing paradigm
you do not struggle to try and change the problematic model.
You create a new model and make the old one obsolete."

– Buckminster R. Fuller

PREFACE

The Millennium Project Session on the Futures of Technologies at the Futures Conference 2025 offered a unique opportunity to explore socio-technical futures of work through narrative foresight and collective intelligence. The conference as a whole provided a lively space for innovative thinking and exchange in the field of futures studies.

At the heart of this workshop is the understanding that no single individual or discipline can fully grasp the complexity of the socio-technical transformations ahead, nor address them alone. By combining diverse perspectives, knowledge, and cultural insights within a systematic methodological framework, collective intelligence serves as an essential and guiding resource that enables us to identify common opportunities and develop responsible, actionable strategies.

Work is becoming increasingly independent of space and time, shaped by rapid technological evolution and pervasive digitalisation, and demands new skills, mindsets, and capacities for adaptation. It is even transforming the very meaning of the word “work” itself, together with its practices, structures, and roles. During the workshop, participants built on previous studies and engaged in co-creative discussions and visual techniques, while exploring these dynamics through futures provocations and narratives. In doing so, they experimented with the consequences of some of these potential shifts on daily life and professional practices, moving beyond conventional approaches to imagine futures of work that are resilient and desirable, while seeking to balance awareness of challenges with a positive perspective grounded in human needs and aspirations.

The collaboration between The Millennium Project and Twinning Spaces 2035 highlights the value of bridging global foresight networks and academic research and their commitment to cultivating plural dialogues on the future. The Helsinki Node, hosted by the Finland Futures Research Centre, has collaborated with The Millennium Project for more than two decades, including through the Futures Conference, now in its 25th edition, which has brought together numerous chairs and experts over time. The active involvement of the Co-chairs of the Helsinki Node in coordinating the workshop, Glenn’s insights stimulating discussions, and my own contributions to the group conversation and reporting, along with those of all participating experts, highlights the importance of collaboration among diverse actors in navigating complex challenges in a participatory way.

This experience reinforces the idea that foresight is not just abstract speculation, but a collective practice of responsibility and co-creation within rigorous methodology. The workshop suggests that the futures of work, shaped by emerging technologies, environmental crises, and social transformations, require us to not only imagine, but also actively co-define, discuss, and build preferable futures, integrating values of wellbeing, sustainability, and ethics at every step.

I hope this report inspires readers to reflect on the value of collaboration and the importance of thinking collectively with positivity, while recognising collective intelligence as a cornerstone for the decades ahead.

Bologna, September 6th 2025

Mara Di Berardo

Communications Director, The Millennium Project
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ABSTRACT

This report presents the process and the findings of the Millennium Project Special Session held at the Finland Futures Research Centre (FFRC) Conference in Turku, Finland on 11th June, 2025. The MP Session was conducted within the FFRC research project T-winning Spaces 2035 that is ongoing at University of Turku, exploring futures of work, work spaces, and new paradigm of work. The Twinning Spaces 2035 is a research project funded by the Research Council of Finland, and the European Union NextGenerationEU. It is headed by Aalto University with University of Turku and University of Tampere as partners. The Session was organised in co-operation between University of Turku, Aalto University, Millennium project, and the Finnish Society for Futures Studies. The session was an interactive Futures Clinique including futures provocations. The aim of the session was to delve deeper into the four radical narratives developed within T-winning Spaces 2035 project and ideate how to make these narratives more preferred. Here the modified Futures wheel was utilised to structure the ideation process. The findings included technological innovations, more well-being centric solutions and social process, which would help the personas of the narratives to deal with the problems and challenges they face.

***Keywords**: radical narratives, futures of work, AI, Millennium Project, Futures Clinique*

RESUME

Ce rapport présente le processus et les conclusions de la session spéciale du Projet Millennium, organisée lors de la conférence du Centre finlandais de recherche sur l'avenir (FFRC) à Turku, en Finlande, le 11 juin 2025. Cette session s'inscrivait dans le cadre du projet de recherche du FFRC « T-winning Spaces 2035 », mené à l'Université de Turku et explorant les futurs du travail, les espaces de travail et les nouveaux paradigmes du travail. « T-winning Spaces 2035 » est un projet de recherche financé par le Conseil finlandais de la recherche et le programme européen NextGenerationEU. Il est piloté par l'Université Aalto, avec les universités de Turku et de Tampere comme partenaires. Organisée en coopération avec l'Université de Turku, l'Université Aalto, le Projet Millennium et la Société finlandaise d'études prospectives, cette session était une clinique interactive sur l'avenir, incluant de réflexions provocatives sur l'avenir. Son objectif était d'approfondir les quatre récits radicaux développés dans le cadre du projet « T-winning Spaces 2035 » et de réfléchir à la manière de les rendre plus souhaitables. Ici, la roue des futurs (futures wheel) modifiée a été utilisée pour structurer le processus d'idéation. Les résultats comprenaient des innovations technologiques, des solutions davantage axées sur le bien-être et un processus social, qui aideraient les personnages des récits à faire face aux problèmes et aux défis auxquels ils sont confrontés.

Mots-clés: *récits radicaux, avenir du travail, IA, Projet Millennium, Clinique des futurs*

RESUMEN

Este informe presenta el proceso y los hallazgos de la Sesión Especial del Proyecto del Milenio celebrada en la Conferencia del Centro de Investigación de Futuros de Finlandia (FFRC) en Turku, Finlandia, el 11 de junio de 2025. Dicha sesión se llevó a cabo dentro del proyecto de investigación del FFRC T-winning Spaces 2035 de la Universidad de Turku, explorando diferentes narrativos futuros del trabajo, espacios de trabajo, así como nuevos paradigmas del trabajo. T-winning Spaces 2035 es un proyecto de investigación financiado por el Consejo de Investigación de Finlandia y la Unión Europea NextGenerationEU. El consorcio está formado por la Universidad de Turku y la Universidad de Tampere y dirigido por la Universidad de Aalto. La sesión se organizó en el marco de cooperación entre la Universidad de Turku, Universidad de Aalto, el proyecto Millennium y la Sociedad Finlandesa de Estudios de Futuros. La interactiva se basó en el uso de la Futures Clinique incluyendo una provocación a diversos narrativos futuros. El objetivo de la sesión fue profundizar en las cuatro narrativas radicales desarrolladas dentro del proyecto T-winning Spaces 2035 y idear cómo hacer que estas narrativas tengan una mayor aceptación. Para ello se utilizó la Rueda del Futuro (Futures Wheel) modificada. Los hallazgos incluyeron innovaciones tecnológicas, soluciones más centradas en el bienestar y procesos sociales que ayudarían a los personajes de las narrativas a abordar los problemas y desafíos que se pueden encontrar.

Palabras clave*: narrativas radicales, futuros del trabajo, IA, Proyecto del Milennium, Futures Clinique*

1. INTRODUCTION

This report presents the process and findings from a co-creative foresight exercise titled “The Radical and the Resilient: Narratives to highlight the road to desired futures of work”. It was conducted on June 11, 2025 in Turku within the framework of the Special Millennium Project Session at the 25th international Futures Conference 2025[1], organised by the Finland Futures Research Centre (FFRC), in partnership with VTT Technical Research Centre of Finland Ltd. The conference, taking place in June 10–12, 2025 was themed “Futures of Technologies – Mutual Shaping of Socio-Technical Transformations” and placed foresight at the core of critical dialogues on ethics, Artificial Intelligence (AI), and the evolving futures of work. It convened a multidisciplinary group of scholars, foresight practitioners, technologists, researchers, business representatives and policymakers to explore how emerging technologies both shape and are shaped by societal dynamics. Across three days, the conference served as a powerful platform for knowledge exchange and co-creation. Over 330 participants from 40 countries shared insights, tools, methods, and visions for how foresight can support governance, democracy, and collective resilience in uncertain times.

The Millennium Project Special Session was organised in the form of a futures clinique, a specially structured workshop, as part of a broader foresight project called T-winning Spaces 2035[2], funded by the Research Council of Finland and the EU NextGeneration. The full name of the project is ‘Winning spatial solutions for future work, enabling the double twin transition of digital/green and virtual/physical transforming our societies by 2035’ and it is coordinated by Aalto University, in partnership with University of Turku and Tampere University. T-winning Spaces 2035 aims at increasing the understanding of the sustainability challenges of future digital remote working and studying how those could be tackled with optimal spatial solutions and practices for households, cities, companies and employers. This objective is pursued by investigating how transformations in work ecologies, automation, and AI impact social cohesion, wellbeing, and future governance.

Narratives can reveal systemic tensions and emerging transitions in future labour landscapes, possibly overcoming them.

The Special Millennium Project Session was organised in collaboration with the Finland Futures Research Centre (FFRC), the Finnish Society for Futures Studies, Aalto University, and the Helsinki Node of the Millennium Project. By integrating narrative foresight, embodied participatory techniques, and collective sense-making, the Millennium Project Special Session aimed to generate grounded, situated, and plural visions of work futures that acknowledge both technological dynamics and lived human experiences.

The workshop was designed to elicit situated socio-technical imaginaries of the future of work through group engagement with actor-based, radical narratives set in 2035. The pre-phase opened with an introduction to the project’s objectives and the workshop’s role within it, followed by a keynote from Jerome Glenn, CEO of the Millennium Project[3], who provided foresight insights that framed and enriched the narrative exercise. Further futures provocations were given by the chairs of the session, to stimulate interactive co-creation in small groups elaborating the narratives towards desirable futures.

1 https://futuresconference2025.com

2 https://t-winning-spaces2035.com

3 Glenn is also Member of the Advisory Board of the T-winning Spaces 2035 Project.

After that, a compact version of the Futures Clinique method was applied where participants explored the above-mentioned narratives collaboratively via a repurposed Futures Wheel (Glenn 2009). This process was chosen to enable structured reflection and agile co-creative elaboration in small groups. The four narratives – originally constructed by the project team at the Finland Futures Research Centre using paradox probing (Heinonen, Viitamäki & Taylor 2025), a two-round Delphi study, and expert interviews (Heinonen & Viitamäki 2025; 2025b) as part of the T-winning Spaces 2035 project[4] – offered diverse perspectives on hybrid work futures. Participants then engaged with four detailed fictional narratives, each centered on a persona navigating a distinct socio-technical context – ranging from ecological restoration and digital freelancing to clinical medicine and quantum computing – providing a wide-angle view on the potential transformations of work.

The report is structured into the following five main sections. The first part introduces the foresight exercise and outlines the objectives (Ch. 1) and methodology (Ch. 2) of the project, including the narrative development process and the design of the participatory workshop. The third chapter reports the data collected from seven workshop groups, each engaging with one of the four narrative personas: Edvin the Econaut, Irene the Influencer, Doris the Dream Designer, and Ranjit the Quantum Revolutionist. The analysis section (Ch. 4) synthesises contributions through mapping the findings, via thematic exploring the topics, and clustering the contributions through a PESTEC classification. The report concludes with key insights and reflections (Ch. 5), followed by Appendixes that provide supplementary material, such as methodological notes, and nutshell descriptions of each narrative character.

1.1 Objectives

The Futures Clinique pursued multiple objectives as a project workshop. It aimed to further develop a narrative-based foresight methodology grounded in imaginaries of work, and to examine how situated, affective, and socio-culturally embedded narratives can reveal systemic tensions and emerging transitions in future labour landscapes, possibly overcoming them. A key focus was the collective reworking of the four character-based narratives, enabling participants to explore their implications across different dimensions. Through this process, the workshop also served as a testing ground for an adapted version of the Futures Wheel, used as a heuristic to support group-based speculative inquiry and to surface plural, future-oriented insights. The results of this Millennium Project session will directly feed into the next steps of elaborating and finalising the radical narratives of futures of work.

Acknowledgements

As authors of this eBook, we express our sincere gratitude to all those who kindly contributed in various ways to our work, in terms of time, interest and insights, in particular the T-winning Spaces 2035 Project researchers, and all the participants and moderators of the Millennium Project Special Session. Special thanks go to **Jerome Glenn**, CEO of the Millennium Project, for the keynote he gave at the Millennium Project Special Session and for commenting the work of all the small groups. We are also grateful to **Saija Toivonen**, co-ordinator of the project consortium from Aalto University, and **Osmo Kuusi** for contributing to the planning and chairing of the session with Toivonen and Heinonen. Kuusi is a special advisor in our project. **Mikkel Knudsen**, **Elisa Oinonen**, **Hazel Salminen** and **Lassi Tähtinen** acted as invited moderators and reported on their small group work. Thanks also go to **Juho Ruotsalainen** for contributing to creating the narratives and to the contents of this report, as well as to **Anne Arvonen** for the design and the layout of the whole publication at FFRC Turku office, and for **Kahawalage Pimali Tania Wijerathna** who acted as conference assistant in our session. For the funding, we thank the Research Council of Finland (decision #353326) and the European Union NextGenerationEU.

[4] See Appendix 2 for details.

2. METHODOLOGY

The workshop was developed by following the Futures Clinique (Heinonen & Ruotsalainen, 2013) approach, a participatory and exploratory workshop format and a collective futures research method designed to engage groups in jointly exploring future uncertainties, disruptions, and opportunities for innovation (Fig. 1). The method's primary aims are to promote futures thinking and preparedness, stimulate provocative dialogue[5], and leverage collaborative creativity to generate new insights, ideas, and actionable responses to complex future-oriented topics. By using the metaphor[6] of a medical clinic to explore future-oriented challenges, participants – whether representing companies, institutions, or entire societies – are invited to act as "doctors" and take topics as "patients" facing uncertainties or disruptions, while moderators serve as "diagnostic enablers" rather than "doctors". Through tailored tools and collective inquiry, the Clinique helps uncover the root causes of complex issues, not just their symptoms, and collaboratively generate "prescriptions" for healthy, alternative futures. Unlike traditional planning processes, the Futures Clinique emphasises **imaginative**, **preferable**, as well as **radical and surprising futures**, encouraging participants to break free from present constraints and engage in transformative thinking. This kind of 'out-of-the-box' thinking includes anticipating disruptions, because as Spitz (2024) notes that "despite technological accelerations, change is generally slow, difficult and unequally distributed", whereas the tempo of disruption is fast. Tipping points may cascade rapidly.

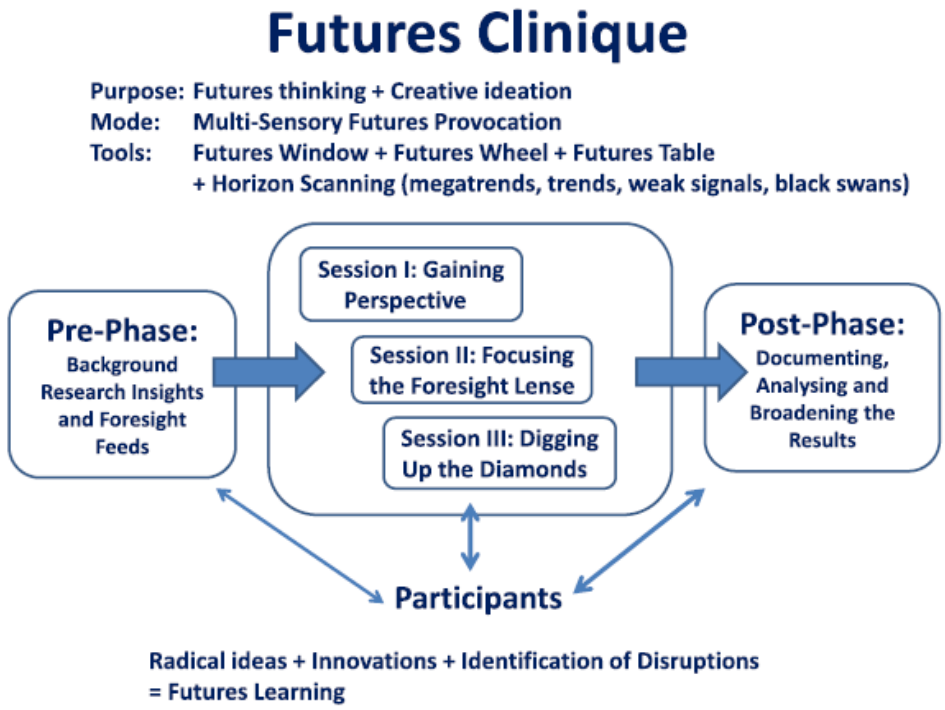

***Figure 1**. The flow chart of a Futures Clinique (Heinonen & Ruotsalainen 2013).*

[5] On the role and importance of provocations in futures studies and for innovation, see also Cainelli & Janissek-Muniz (2025).

[6] Inayatullah et al. (2016) discuss and encourage the use of metaphors in futures research. In the Futures Clinic process, the medical metaphor used not only stimulates but also structures the process. Moreover, Inayatullah devotes one whole layer to metaphors in his CLA method (Inayatullah 1998). See e.g. Heinonen, Ebrahimabadi, Viitamäki et al. 2024 on a special application of CLA.

Usually, the futures Clinique is preceded by a pre-phase workshop where participants receive thought-provoking papers and background material to introduce the theme and the goals of the Futures Clinique and to place them into a broader socio-economic context. Sometimes, they receive questions whose answers are discussed in the first phase of the workshop. Given the voluntary participation to the workshop during the conference in Turku and the unavailability of registering in advance, the pre-phase session merged with the first phase of the workshop. The futures clinique can thus be flexibly adjusted for the purpose, applied in a more concise form, while still retaining the main components of the process.

Futures Clinique emphasises imaginative, preferable, as well as radical and surprising futures.

The workshop unfolded through three interconnected phases: 1) gaining perspective, where participants engaged with future narratives and provocations to build initial understanding and to receive points of views on the theme to inspire and provoke; 2) focusing the foresight lens, where group discussions deepened critical reflection; and 3) digging up the diamonds, where insights were organised and analysed to reveal emergent themes. The workshop revolved around a framework of four future-oriented personas set in 2035 (Ch. 3 and Appendixes 1–2) – discussing, critiquing, and enriching these narratives collaboratively by using a repurposed Futures Wheel (Glenn 2009).

2.1 Gaining Perspective

This phase of the workshop included a presentation of the T-winning Spaces 2035 project and rationale for the workshop by Session Chairs Sirkka Heinonen (FFRC), Saija Toivonen (Aalto University), and Osmo Kuusi (Finnish Society for Futures Studies). They highlighted the aim and background of the workshop, the four radical narratives on which the following group discussions were based, and instructions for how to elaborate them (Heinonen, Toivonen & Kuusi 2025). These presentations were followed by a keynote address on the futures of work by Jerome C. Glenn, CEO and co-founder of The Millennium Project, to inspire the discussions. Both presentations provided useful and focused information, fresh foresight points of view, and current phenomena, trends, and weak signals to help mapping the environment.

Introduction to the Radical and the Resilient

During the first phase, the above-mentioned Session Chairs Heinonen, Toivonen and Kuusi highlighted the overarching goals of the T-winning Spaces 2035 project and of the workshop, together with stating the aim of the session. In addition, they presented the new paradigm of hybrid work that was constructed within the project. Moreover, they gave a general briefing of the four narratives, and touched upon the semiotic power of the narratives.

As Ralston & Wilson (2009) praise the power of scenarios in uncertain times to develop strategies through ‘rehearsals of the future’, the same goes for narratives. If one wants to interlink foresight with decisions and action, the more immersive and vivid the material is (in our case narratives), the closer outlook is more easily available for what the futures will bring and accordingly, a better preparatory mindset can be built.

Figure 2. *Introduction as Futures Provocation by Sirkka Heinonen, Saija Toivonen, and Osmo Kuusi. Photo: Mara di Berardo.*

The T-winning Spaces 2035 project focuses on developing winning spatial solutions for future work, supporting the double twin transition of digital/green and virtual/physical transformations in society by 2035. As more workers become 'digital' and able to work wherever they prefer, the role of physical spaces – such as their size, layout, type, and location – can be emphasised in importance. Sax (2022) even claims that the 'future is analogue' i.e. the overload of digitalisation and virtualisation may bring about a backlash and yearning towards the analogue. The spatial solutions affect not only the performance and wellbeing of workers but also have significant environmental impacts, influencing how we use spaces, commute, consume, and spend leisure time. The project aims to increase understanding of the environmental and social impacts and challenges of digital remote work and to provide spatial solutions along with strategy, policy, and management recommendations for different organisations and individuals to empower them support the double twin transition of digital/green and virtual/physical.

The work package 1 (WP1) in the project's research process began with data gathering through a literature review, interviews, case studies, and a two-round Delphi study (Fig. 3). These inputs further fed into three Futures Cliniques: the first held in Paris in October 2023, the second in Turku in June 2024, and the third also in Turku in June 2025. The findings from these interactions were then shared through conference presentations in Trento (June 2024), Dubai (November 2024), and again in Trento (May 2025). The process culminates in the production of various publications, including peer-reviewed articles (Heinonen et al. 2025; Heinonen & Viitamäki 2025), blog posts (Heinonen & Taylor 2024; Virmajoki & Heinonen 2025), book reviews (Heinonen et al. 2024; Heinonen & Sivonen 2024; Viitamäki & Heinonen 2025) and reports. (See Fig. 3).

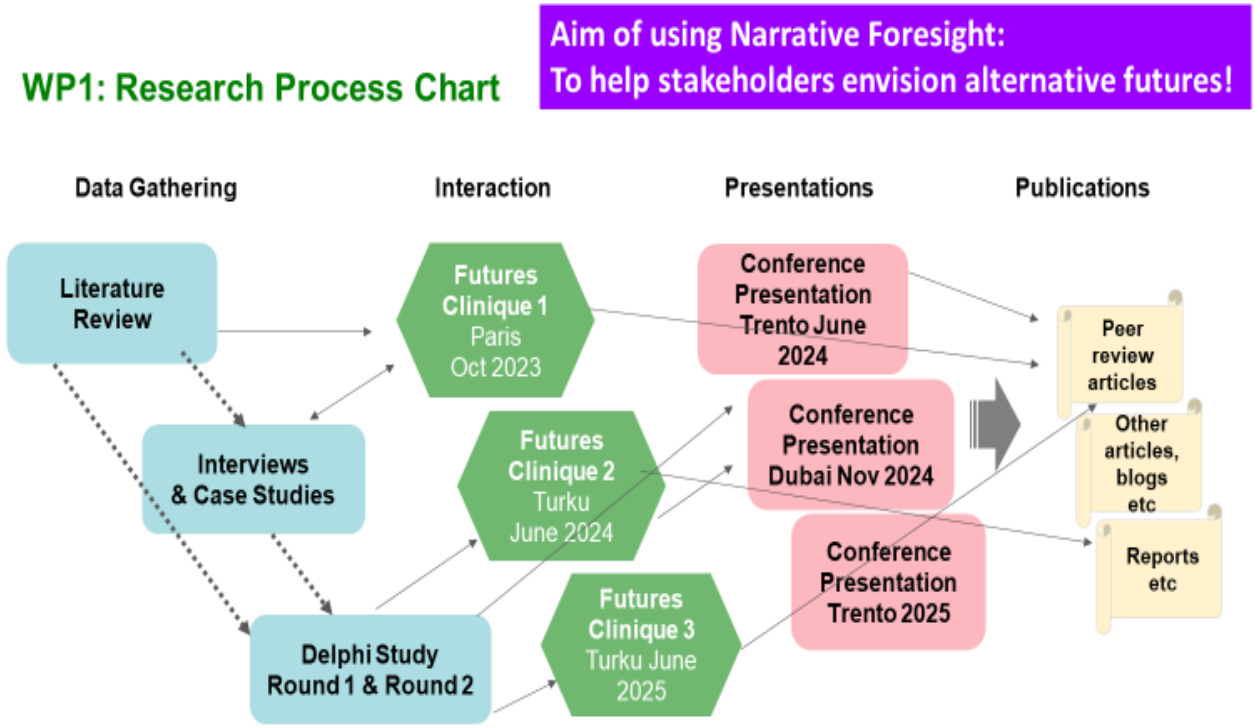

***Figure 3**. Flow chart of the WP1 of the T-winning Spaces 2035 research project.*

The topic of work today involves many contradictory and simultaneous developments. To address this complexity, the team previously applied the method of **paradox probing** to deconstruct complex issues. Paradox probing is a foresight and sense-making method used to explore complex issues by deliberately examining contradictory developments or tensions that coexist (see Heinonen, Taylor & Viitamäki 2025; Heinonen, Viitamäki & Taylor 2025; Heinonen & Viitamäki 2025). It helps identify and understand the underlying paradoxes shaping a topic – like the future of work – by revealing how seemingly opposing trends (e.g., flexibility vs. burnout, autonomy vs. surveillance) can happen at the same time.

Paradox probing is a foresight and sense-making method used to explore complex issues by deliberately examining contradictory developments or tensions that coexist.

It is worthwhile noticing that the four radical narratives about the futures of work that the research team developed were all of human generation, i.e. no AI was used.[7] The narratives were based on a two-round Delphi study and expert interviews. In each narrative there was intentionally a dominating paradox located, based on findings on paradox probing. In the workshop, however, due to the time constraints, the focus was not on paradoxes, but on narratives themselves. Narratives are a powerful tool in futures studies. They form a special field of 'narrative foresight' (Milosevic & Inayatullah 2015). They are very near the art genre of drama (Jarva 2014) and can be claimed to be a central element for futures literacy (Liveley et al. 2021). In the T-winning Spaces 2035 project, narratives are used as strategic tools to help organisations make

[7] In illustrating the narratives, some AI-generated images have been used in this project.

sense of complexity and uncertainties as well as to support anticipatory governance by helping stakeholders[8] envision alternative futures.

The narratives serve as tools for communication, inspiration, sense-making and even manipulation. (Heinonen, Toivonen & Kuusi 2025). The narrative process combines actors' portraits with storyline texts in order to influence policy debates.[9] By constructing alternative futures of work, narratives help make sense of complex developments, offering diverse perspectives for actors situated in varying spatial and temporal contexts. This method allows exploration of multiple possible trajectories of change. Ultimately, our use of narratives in this context reflects the deployment of collective intelligence, drawing from shared insights to shape more inclusive and anticipatory strategies for the future of work. Collective Intelligence is defined by Glenn (2013) as "an emergent property from synergies among three elements: (1) data/info/knowledge, (2) software/hardware, and (3) experts and others with insight – that continually learns from feedback to produce just-in-time knowledge for better decisions than any of these elements acting alone". Following this definition, our Futures Clinique was intended to generate ample insights to be further elaborated and communicated to stakeholders.

Figure 4. *Sirkka Heinonen illustrating new paradigm for futures of hybrid work, with Saija Toivonen and Osmo Kuusi. Photo: Anne Arvonen.*

The **new paradigm for the futures of hybrid work in 2035** was briefly introduced to the audience. It has been sketched out primarily based on the results from our Delphi study. The new paradigm depicts the future world of hybrid work as follows:

"Work is envisioned as hybrid and multilocal, taking place in homes, offices, co-working spaces, forests, parks, and even the metaverse. Despite this diversity, the idea of locality remains important, as people are still physically connected to chosen places. Work life is driven by digital literacy as well as curiosity, creativity, and analytical, critical, and system thinking. The constant need to adapt has made mental health a central aspect of occupational health. While most economic goals are aimed to improve living conditions

[8] The role of stakeholders is essential in the process of creating the narratives. Jarva (2014) argues that if narratives are created without stakeholders, there is a danger that the story world presented is not relevant for stakeholders. Therefore, as part of the project, we have conducted also a stakeholder session focusing on narratives and for receiving feedback.

[9] See also Bazzani (2023) who addresses the capacity of narratives to shape the course of action. He also discusses expectations and imaginaries in the same vein.

globally, individual motivation for work often remains focused on making ends meet. For some, purpose and pleasure intertwine, whereas for many, simply surviving is still the primary concern. Self-realization lies at the heart of this new work paradigm, yet collaboration, co-survival, contribution, and regeneration represent the real foundation. The focus is on serving the common good and securing life for future generations by addressing the urgent challenges society faces."

The above new paradigm of hybrid work was part of a series of futures provocations as introduced by the Session Chairs. The paradigm was also present in the Futures Window that was being shown to the audience in the first phase of the Futures Clinique[10], as well as later during the small group working, displayed as a continuous background screening and intended to nourish imagination of the viewers. The Futures Window is a foresight method, showing visual weak signals in a cavalcade, developed by Elina Hiltunen (Hiltunen 2010; Heinonen & Hiltunen 2012).

Figure 5. *One screen from the Futures Window. Image: Markus Heinonen/Atomix XL v4 Lightning.*

Presentation of radical, actor-based narratives illustrating the spatial and temporal dynamics of remote work, along with practical considerations for the workshop, were aimed to disrupt linear thinking and encourage participants to adopt a fresh, forward-looking mindset. The four actor-oriented radical narratives of the futures of hybrid work for 2035 are based, as mentioned above, on a two-round Delphi study and expert interviews conducted within the T-winning Spaces 2035 Project (see Appendix 2).

[10] The weak signals were chosen and compiled for the purpose of making links and evoking images to the new paradigm. The Futures Window was made by Sirkka Heinonen and Amos Taylor.

The narratives center around the year 2035 as a critical tipping point. Although this time horizon may seem relatively near, rapid advancements in AI and other emerging technologies may bring unexpected socio-cultural and geopolitical shifts in the world of work, as highlighted in Glenn's keynote speech.[11]

The four characters embodied distinct constellations of expertise, life paths, and relational orientations, each located in a specific quadrant defined by the intersecting axes of individual vs. community and freedom vs. control (see Appendix 2).[12] In the quadrant of individual plus freedom, **Edvin the Econaut** is an autonomous eco-restorer who combines mobile DIY science and global mobility to counter biodiversity loss while preserving personal independence. In the area of freedom plus community, **Irene the Influencer** is a digitally nomadic freelancer who blends personal branding with environmental advocacy and seeks belonging in global, networked communities. The quadrant of individual plus control is represented by **Doris the Dream Designer**, a clinical researcher applying AI-assisted dream therapy to foster psychological and vocational resilience, guided by a strong internal ethical compass. Finally, in the quadrant of community plus control, **Ranjit the Quantum Revolutionist** operates as a quantum computing expert confronting surveillance and ethical complexities, while dedicating his efforts to collective well-being and diasporic solidarity. These narratives embed their protagonists within rich technological, social, and emotional contexts, offering situated, human-centered visions of the futures of hybrid work.

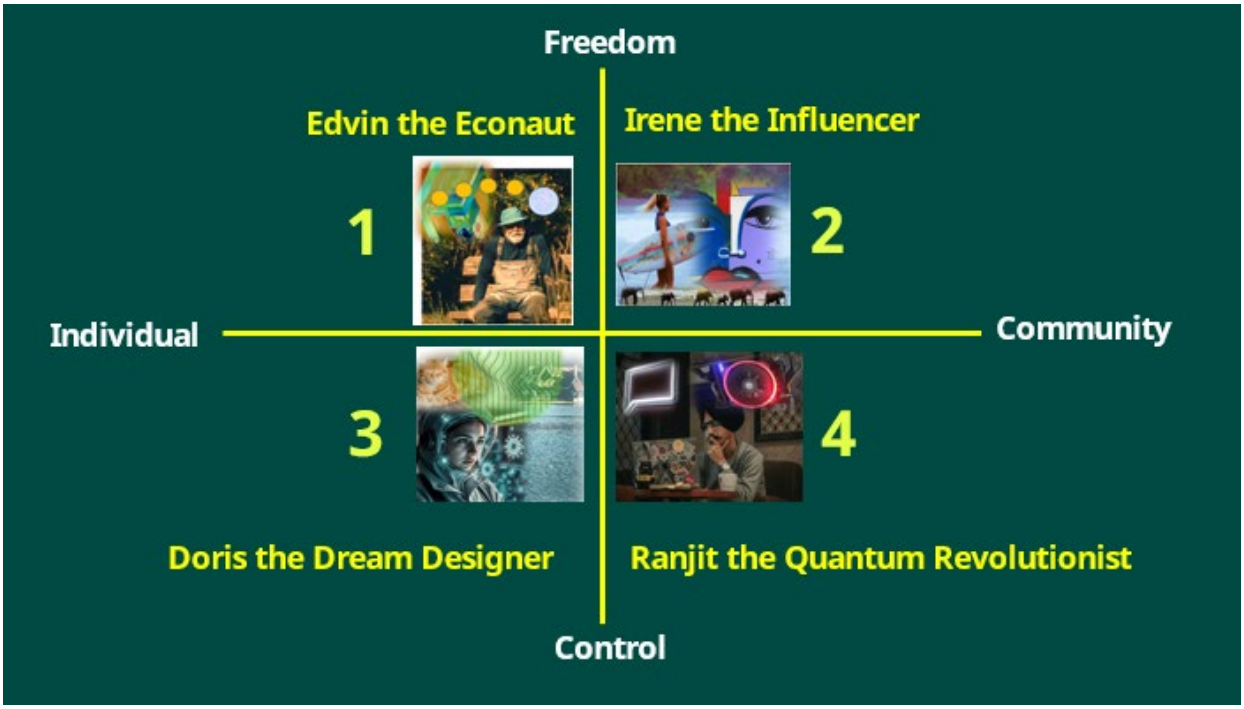

Figure 6. *Four Radical Narratives of Futures of Hybrid Work and Workspaces.*

[11] See also Spitz (2024) who emphasises the shifts to emerge from technologies converging when the barriers between established industries begin to break down. He foresees new business models and value chains, allowing new fields and their combinations to emerge. This naturally will have an impact on professions – some become obsolete, while new ones are created. Spitz gives an example of FoodTech where the development of AI-powered platforms enables the creation of alternative protein sources. This is in line with Karjalainen et al. (2022) who claim that hybrid technologies and industries are part of broader concept and process of hybridisation in society.

[12] The narratives will later in the project be evaluated in terms of their impacts and published in a separate publication.

Each narrative is structured according to a uniform template addressing the dimensions of *Who, What, Where, When, How, and Why*, ensuring both depth and comparability. They explore these dimensions of work from the perspectives of different actors of remote work/hybrid work, all framed within a new paradigm for work that can continue to evolve toward 2045 and 2055 during the discussion. The year 2035 is given as a tipping point beyond which the participants can envision new trajectories and perspectives, possibly pushed from the 'future present' (2035) by global challenges, narrative actor's circumstances, or the prevailing paradox.[13]

The narratives were also complemented by a chronotope matrix (Table 1), a conceptual tool used to map and compare the temporal (chrono-) and spatial (-tope) dimensions of each fictional persona's work life in 2035.14 The chronotope matrix of the four narratives compares spatial, temporal, and occupational dimensions across the cases in order to facilitate initial emotional and cognitive engagement with the material. By organising the four narratives – Edvin, Irene, Doris, and Ranjit – along axes such as geographical location, weekly rhythms, and types of work environments (e.g., home office, office, third places, labs), the matrix helps participants identify contrasts and commonalities. It makes visible how future work is embedded in specific spatio-temporal arrangements, and how these arrangements intersect with technologies, personal motivations, and broader systemic changes.

***Table 1**. Chronotype matrix of the four narratives.*

Narratives	Edvin the Econaut	Irene the Influencer	Doris the Dream Designer	Ranjit the Quantum Revolutionist
What	Eco-restorer	Freelancer	Doctor, therapeutist	AI & quantum physicist
Where	Turku, Turku Science Park, Caribbean etc,	Helsinki & Portugal, Costa Rica	Kuopio, Africa	Oulu, Helsinki
When	Hoffice 2 days, client/case places 2 days, 1 day at office/week	No office, hoffice 2 days, third places 3 days per week, half a year in Finland, another half abroad	Hospital lab 2 days, home private practice 2 days, 1-day voluntary work per week	Oulu office 2 days, third places 2 days, 1 day in Helsinki per week
How	DIY mobile lab	Advanced mobile work equipment	Quantum computer access, hospital lab equipment	High-tech, supercomputer, cell computer
Why	Eco-warrior, wants to combat loss of biodiversity, maintain own health	Fusion of work and life on purpose, satisfaction from growing followers in social media, search for sustainable ICT solutions, priority to belong to a surfer community	Care as personal mission, ethical concerns for global population problems	Wants to help those in distress, support the Indian community

From the T-winning Spaces 2035 project we had a representation at the MP Session in several roles. Jerome Glenn, CEO of the Millennium Project, was our keynote speaker, and he is also Member of the Advisory Board of this project. Saija Toivonen is co-ordinator of the project (Aalto University). Mara di Berardo, Director

[13] Each narrative was characterised as being influenced by one of the relevant paradoxes concerning futures of work as identified within the project.

[14] For the concept of chronotopes, see Tuomi (2019).

of Communications of the Millennium project, is special expert affiliate to our project and was in charge of writing the first draft of this document and making an analysis. Riku Viitamäki, Veli Virmajoki and Amos Taylor are project researchers and participated in the planning, execution, and reporting of this session where they also acted as moderators. The other moderators were: Elisa Oinonen (FFRC), Mikkel Knudsen (FFRC), Lassi Tähtinen (Aalto University) and Hazel Salminen (Finnish Society for Futures Studies). Juho Ruotsalainen and Osmo Kuusi also participated in narratives construction and planning the session.

Figure 7. *T-winning Spaces 2023 project representatives (from left Virmajoki, di Berardo, Heinonen, Glenn, Taylor).*

Keynote Address by Jerome Glenn Commenting on the Narratives

The keynote address by Jerome Glenn provided valuable foresight insights to stimulate interactive co-creation in small group settings by inspiring the participants. He reflected upon the narratives and their possibilities by giving some radical related ideas. His speech laid the groundwork for the narrative development process, offering feedback and presenting key future-oriented perspectives.

Figure 8. *Jerome Glenn commenting on narratives during his keynote speech. Photos: Mara di Berardo and Anne Arvonen.*

Glenn opened by encouraging all participants to take the time to read the narrative texts provided at the event. This is because they are focused a lot on the change and do very good job of dealing with the psychology on that cycle of change – something often overlooked in favor of flashy new data or tools.

Glenn proceeded with a couple of comments. One is that the greatest investment in the history of finance is currently going into Artificial General Intelligence (AGI). It is pretty safe to say that some form of AGI is going to happen. Second, the rate of growth in AI, as we all know, is going faster than everybody thought-including the experts. Based on these developments Glenn argued "it is better to overreact than to underreact". He also pointed out that at the moment, there is nothing standing in the way – nothing, of the greatest concentration of intelligence, power, finance, and politics that has ever occurred. There is nothing stopping AI development right now. That is a pretty certain future… unless we have a wake-up call.[15]

…the greatest investment in the history of finance is currently going into Artificial General Intelligence (AGI).

Jerome Glenn

Glenn suggested that the most effective way to prompt global action would be for citizens to pressure their Ministers of Foreign Affairs to urge the UN Secretary-General to convene a General Assembly meeting dedicated to AGI. He emphasised that this kind of meeting would not be just another vague policy discussion like the recent Paris AI summit. Contrary to the nations, the heads of AI companies like Anthropic, the heads of Grok, and others are taking the development of AGI seriously. They are calling for international regulation, even though politicians are not. This is interesting as it is the other way around from what you would expect.

Moving on, Glenn emphasised that in thinking about the future of aging populations there is an assumption in one of the session's narrative about the "old age" issue that is important, he urged the participants to factor two things into their discussions. First, progress in material science, software, and robotics are accelerating very fast. The Japanese idea of having robots take care of elderly people is starting to look quite likely, and prices will come down. When you think about what you pay someone to take care of an elderly person and compare it to the cost of a robot, by 2035 the robot might be the better choice. Second, longevity research is progressing quickly.[16] A 90-year-old you have to take care of today may not be like a 90-year-old in 2035. That should also be considered.

Glenn then referred to the newly released State of the Future 20.0 publication (Glenn & Florescu 2024)[17] – one of the largest and most comprehensive yet. He then considered the importance for the ongoing T-winning Spaces project of a previous major three-year study on the future of work and technology at 2050 (Glenn & Project Team 2019), particularly referencing the "Self-Actualization Economy" scenario.[18]

Glenn suggested that "Self-Actualization Economy" scenario includes several assumptions. One is that everyone will have access to an advanced version of the semantic web[19] by 2050 at almost no cost. This

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[15] See Glenn 2025 about the transition from ANI (Artificial Narrow Intelligence) to AGI (Artificial General Intelligence).

[16] See e.g. Farrier & Moizier 2010.

[17] See also a book review on that report by Viitamäki & Heinonen 2025.

[18] See a roundtable discussion (video + text) where the self-actualization economy is addressed (Heinonen, Viitamäki, Taylor & Ebrahimabadi eds 2024). Weigel (2018) reminds us that 'work is the biggest stage in our lives'. She emphasises that our personal talents, combined with our unique values, crystallise the mark that we leave in the world. This is expected to lead into the labour markets that will increasingly be formed by free workers. Freedom, however, requires responsibility and knowhow 'to do what you like, what you do not like and what you need'.

[19] Semantic web means Web 3.0.

means everybody gets access to everything. Another assumption, closely related to the previous one, is that education will finally shift from job training to self-actualization – helping individuals discover who they are, which becomes a key advantage in a world where traditional jobs may no longer exist. Finland has already moved in this direction by incorporating the human element into its educational system. The reasoning behind this is that if jobs are not what they used to be, your competitive advantage is you. Glenn crystallised the idea **"Nobody cannot be a better you than you are".** People need to find their place in the world and find markets for themselves worldwide. People are not being taught, to know themselves, with Finland as an exception Glenn argued. Successful people usually say that they are so because they followed their passion. "What happens if all people follow their passion but connect to markets worldwide and have a genius at their disposal 24-hours a day every time?". That is a different kind of way of acting in the world that we have today.

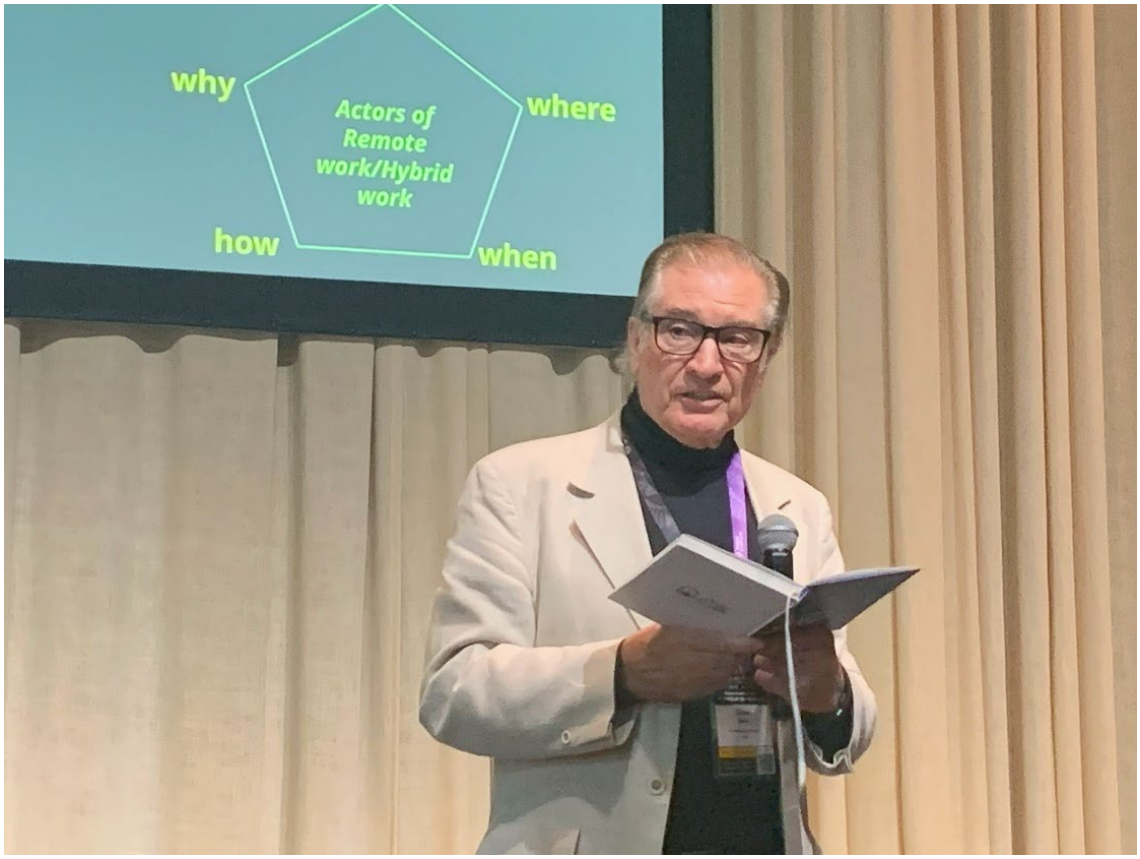

Figure 9. *Jerome Glenn introducing the State of the Future 20.0. Photo: Mara di Berardo.*

Reading from a section in the Work/Technology 2050 study, Glenn concluded by outlining seven reasons why this technological revolution is fundamentally different from the previous ones, considering that many have argued that every technological revolution, from the agricultural age to the industrial age and to the information age, created more jobs than each replaced. Some people ask: what is different this time?

Nobody can be a better you than you.

Jerome Glenn

First, the acceleration of technological change itself is unprecedented – not only in AI, but also in fields like synthetic biology and quantum computing. **Second**, it is not just the individual technologies, but the interdependence and synergies among them that will cause widespread surprises, much like how a smartphone integrates countless functions in one device. **Third**, we now have a global platform – the Internet – which enables near-instantaneous and low-error technological diffusion, unlike previous eras where standardizing and

deploying new technologies required enormous time and resources; today, with a simple keystroke you can update systems worldwide. **Fourth**, the standardization of databases and communication protocols actually enables truly global futures research and dramatically accelerates both applied and basic science.

Fifth, unlike previous periods of technological transformation, we now have no pauses or plateaus in the pace of change, allowing time for individuals and cultures to adjust to the changes. Where all of our technologies are constantly changing all the time, this causes anxiety, difficulty for planning and uncertainty. **Sixth**, for the first time, we have billions of empowered individuals in relatively free and democratic markets, who can initiate their own projects, products, and services – so change is no longer driven by a few entrepreneurs, but by vast decentralised creativity. **Seventh**, and most importantly, we now have machines that can learn how we do what we do – and then do it better. These seven points, Glenn argued, together make the current transition truly distinct from anything we've experienced before.

We now have machines that can learn how we do what we do – and then do it better.

Jerome Glenn

He closed by pointing out that cultural change must be actively shaped – like in the 1960s in the USA with music. He stated that a key that will make the transition from jobs economy to a self-actualization economy is the active involvement of the arts. The writers, of music, television shows, movies, plays, can show how the transition is possible – just like the music of the 60s showed how new values and social relations were possible.

Figure 10. *Participants during Glenn's keynote speech. Photo: Anne Arvonen.*

2.2 The Workshop

During the second part of the workshop, participants explored the process of focusing the foresight lens to deepen critical reflections by immersing themselves in the topics and engaging in discussion.

Participants were assigned to tables randomly. Upon arrival, they were welcomed at the door by the moderators, who ensured that no one entered directly. Each participant received a note with a number (from 1 to 7), indicating their assigned group. This method was used to randomise group distribution. Participants were then directed to the table marked with the number they had received after the speeches. The moderators then were in charge of their small group working phase, and Jerome Glenn, Saija Toivonen and Sirkka Heinonen circulated in different groups, observing and answering to possible questions.

Each table was assigned one persona among the four narratives and was asked to make the narratives more desirable from different points of view, being them for employers, for employees, society or nature. The work started with guided readings by the moderators of the group, one per each table, to help the participants get familiar and immerse in the narratives. Participants were provided with printed versions of these narrative profiles to use them when needed.

Figure 11. *Group work during the workshop. Photo: Anne Arvonen.*

To support systemic mapping and idea generation during the Futures Clinique, each table was equipped with a large worksheet reproducing a repurposed version of the Futures Wheel, acting as a *futures mindmap* for collaborative work. While the traditional Futures Wheel maps (Glenn 2009) shows cascading consequences in a temporal causal logic (first-, second-, and third-order effects), the version used in the workshop was topic-centered rather than time/consequence-centered. The Futures Wheel was adapted to allow participants to elaborate and evaluate the narratives co-creatively in small groups, and to guide participants in exploring concentric layers of implications stemming from the narrative under analysis.

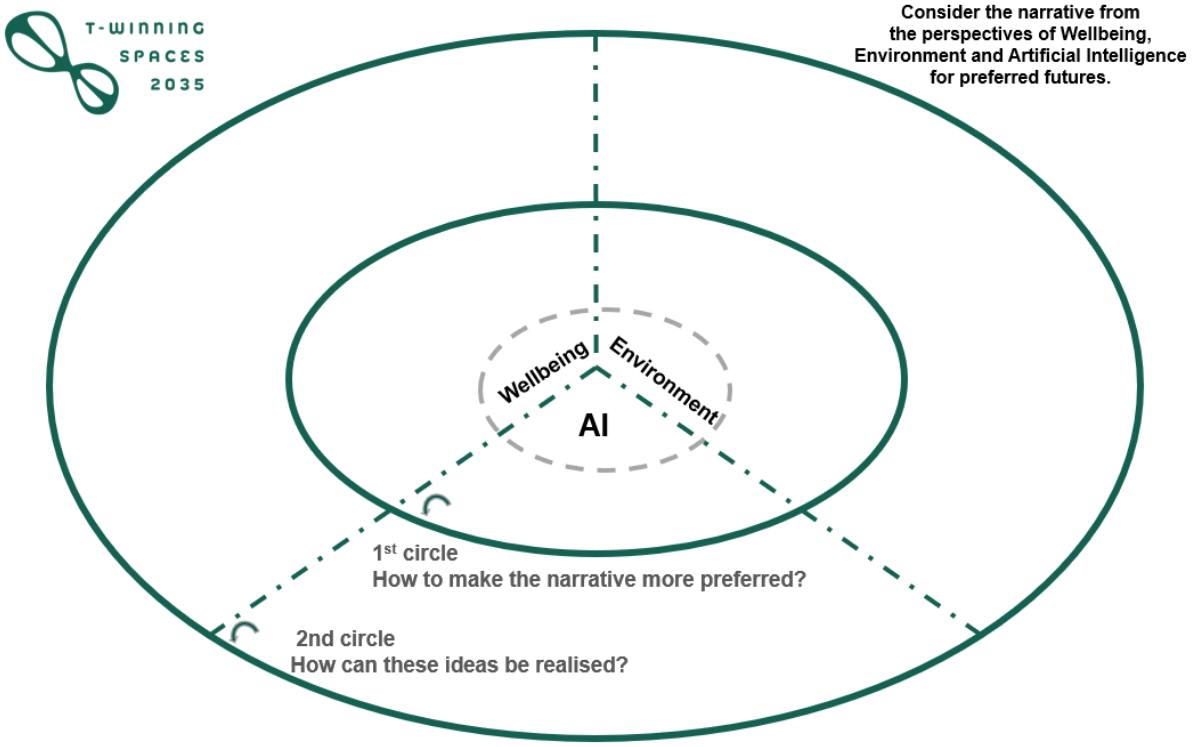

Figure 12. *Futures Wheel concept applied as modified.*

The structure featured three concentric circles revolving around the narrative assigned to the group. At the centre of the diagram, participants were invited to consider the narratives through three core themes as reflection lenses: **wellbeing**, **the environment**, and **AI** – each delineated by an axis that segments the circle accordingly. The objective was to generate ideas that reflect and enhance each of these areas. The triple thematic core was surrounded by two circles. The **innermost circle** prompts participants to explore how the given narratives could be made more preferable, inviting value-driven critique and aspirational thinking. When considering what is 'preferable' or 'desirable,' participants were invited to decide for themselves – reflecting on whose perspective they were prioritising.

Moving outward, the **second circle** asked how these ideas could be realised in practice, encouraging participants to think critically and constructively about pathways to desirable, thus bridging vision with strategy. In line with the guiding principles of the Futures Clinique, the emphasis was placed not on the most probable developments, but on those that are possible, preferable, and even improbable. Thus, the basic stance of elaboration was – to use Tuomi's (2019) criteria – possibilistic instead of probabilistic, then moving towards constructivist approach when narrowing the focus on desirable futures.

The aim was for each thematic segment and both concentric circles to be populated with at least some ideas using post-it notes. However, the flow of discussion was intentionally left open-ended: if a particular idea resonated with the group, participants were encouraged to delve deeper into that direction. It was also entirely acceptable for someone to generate an idea for the first circle and immediately suggest a corresponding action or implementation for the second, reflecting the iterative and intuitive nature of the process.

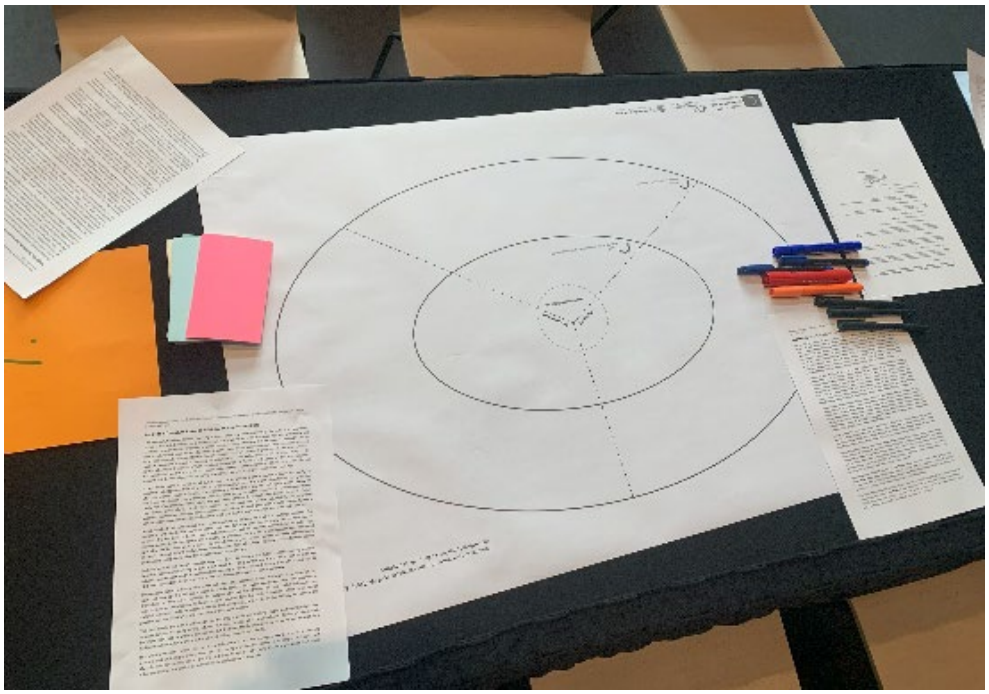

***Figure 13**. Futures Wheel.*

Colorful post-it notes, markers, and printed narrative texts surrounded the diagram to support collaborative ideation, together with the number of the table printed on a paper and a name list for names and email addresses, integrated into a GDPR paper to be signed and together with information sheets concerning the data management of the project. The discussions were also recorded for the exclusively internal use of the project, to guarantee proper documentation of the exercise.

***Figure 14.** Group 1 during the workshop. Photos: Jimmy Ong Cheng Kea and Mara di Berardo.*

In the end, each group shared their key findings and ideas in short presentations (3 minutes per group), followed by expert feedback and brief discussion (2 minutes per group), with comments from Jerome Glenn and Sirkka Heinonen. The aim of this last phase was to foster cross-fertilization across the groups – allowing participants to compare, complement, and deepen each other's insights, while surfacing emerging themes and tensions. To prepare for this exchange, groups synthesised their discussions into concise narrative summaries, either presented by an appointed spokesperson or supported by the group moderators.

3. DATA

The workshop targeted anyone interested in the futures of work, in narratives and storytelling, and in applying hybrid foresight methods. During the session, approximately eighty attendees drawn from academia, industry, and policy domains engaged with the presentations.[20] Overall, 57 participants joined the seven groups working on the narratives. Although the number of participants in a Futures Clinique usually is max. seven per group, the tables hosted more participants to allocate everyone. There were approximately 8 persons per group in the session. Moreover, due to the numbers of participants some narratives were assigned to more than one group (see Table 29 in Appendix 3).

The data of the analysis are composed by the final restitution shared during by each group at the end of the workshop and by the post-its as reported in each futures wheel, for a total of 147 post-its. The categorisation of post-its into thematic areas (Wellbeing, Environment, Artificial Intelligence) and Futures Wheel circles (Circle 1, Circle 2, External) in this analysis is based on the original placement made by participants during the final presentation or immediately afterward. Photos were taken at that stage specifically to avoid subsequent repositioning. However, some post-its were placed on the borders between areas or circles, and their classification is therefore ambiguous.

Moreover, some ideas may have been miscategorised by participants themselves – for instance, a post-it may relate more closely to a different thematic area than the one it was placed in – though this cannot be verified. For consistency, post-its located outside the circles have been assigned to the corresponding thematic area, even if they are not clearly attributable to either Circle 1 or Circle 2 or thematic areas Wellbeing (W), Environment (E), and Artificial Intelligence (AI). Nonetheless, all post-its contributions are considered valuable and will be taken into account in the subsequent phases of the analysis, particularly in response to the core workshop questions (see Table 30 in Appendix 3).

The following paragraphs (3.1–3.7) report the data from the discussions for each group composed as follows: transcription of the final summary as elaborated by the reporting person and elements composing each Futures Wheel. The analysis of the data is reported in Ch. 4.

[20] However, not everyone signed the information sheets in the working groups, and there were some participants moving from table to table during the workshop or when attending the introductory sessions.

3.1 Group 1 – Edvin the Econaut

The Narrative

Respect nature! Believe in yourself! I still hear those words of advice that my parents gave me. They convinced me to be master of my own life and not depend on anyone coming to rescue. Look where this combination has indeed brought me today – practical skills of engineering ingenuity and biophilic projects have grown into more than just sustaining a livelihood. I can also see the results of my work pay at many levels – immediate eco-restoring effects from purifying sea water in the Baltic and from planting mangroves in the Caribbean. A constant stream of organisations including the UN asking me to missions around the globe.

However, this mobile lifestyle has a price to pay. After my beloved wife passed away twenty years ago I've been a kind of lone wolf. My three adult children, who got used to travelling with me, have now all moved abroad because of their jobs and, unfortunately, I do not see them often. In Turku I live alone in my small loft apartment where I have constructed a mini-hoffice – lab that also includes a portable set for travel and a roof garden with hydroponic farming installations. I have also been asked to become an ambassador for Solar Food – testing the process of producing food from air through electrolysis.

However, recently I have started to question my own motives for the work I do. The truth is, if I stopped working – or even stopped travelling for fieldwork – I fear my physical and mental health would collapse. I used to think I was irreplaceable. I believed only I could do the planning and the actual the work, a belief reinforced by my reputation and how in-demand I was. No matter how many long-distance flights I had to take each year, I felt I always had to be there – at least for the photos, picturing me holding a shovel or a precision-driller, beaming for the camera. When at home I'm pretty much a hermit and I'll submerge myself in the hoffice and my lab work. I appreciate being alone, but I love the attention. Myself – and my generation – once believed that work should feel like play, offering not just salary and status but also pleasure and personal fulfilment. But now, when I observe my children and grandchildren, I notice a shift motivated by something different. They are not driven by immediate gratification, nor do they think of themselves as individuals pursuing personal interests. Instead, the younger generations seem guided by a sense of collective purpose and longer-term meaning, due to the harsh challenges they face.

Accepting their responsibility to clean up, younger generations have adopted a quiet but focused and determined energy, with most projects stretching beyond their lifetime. Instead of lone heroes like me, they do not usually aspire to work alone but as part of collectives. Even though they are determined and diligent, they embrace slowness and idleness as an internalised act of both resistance and resilience. Being "slow" and "passive" insulates them against excessive and destructive ambition but also helps maintain high quality through uninterrupted attention and honing one's craftmanship.

However, this year the climate change reached a tipping point which made all my previous work obsolete, as the ecosystems ravaged. I still care about the ecosystems, and a sense of urgency takes over me. I know younger generations have developed solutions to crises but these solutions are not put into practice effectively due to their mentality. There are too few of them and their mentality is carved by the fact that they never have the number of peers that my generation did. They don't have incentives to compete with each other to the same extent as we had, and therefore they freeze under urgency.

The situation transformed me into a generational bridge-builder and I started to mobilize younger generations across global networks to work harder before it is too late to find any solutions. My focus moved toward collective urgency, channeling my knowledge and connections to spark action among youth who would face an unforgiving future. My new profession is to share knowledge and especially networks to share solutions in an urgent manner.

Reporter/Moderator: Veli Virmajoki

***Figure 15**. Group 1 final synthesis. Photo: Mara di Berardo.*

Small Group Working

Group 1's discussion revealed two central tensions in the narrative of Edvin the Econaut: the emotional engagement needed to motivate action, especially among younger generations, and the demand for more rationality and rigor in how these actions are conceived and implemented. Participants seemed to emphasise that fostering an emotional connection is crucial for making the narrative more preferable, as emotions can drive urgency and collective mobilization. At the same time, they recognised the need, especially for youngsters, for a scientific and disciplined approach to ensure that efforts are effective and well-structured. A more sustainable world, participants argued, will only take hold if emotions cause actions and evidence stays visible and trusted. AI was a theme that radiated from its own sector to almost everywhere: it was not seen as a mere power-tool but like something that can be used to generate and preserve valuable things in our world due to its capacities to transfer knowledge. Environmental notes point toward lifestyle and culture as something that are needed for sustainable futures, and change and action is expected to be encouraged and performed through multisensory routes.

...lifestyle and culture as something that are needed for sustainable futures.

In the specific of the first circle of the Futures Wheel, the post-its in the wellbeing dimension focused on reducing loneliness by sharing knowledge and building networks that connect generations, reflecting Edvin's own isolation and new role as a generational bridge-builder. There was a desire for satisfaction through concrete, tangible project outputs like nature restoration, which provided visible results to maintain motivation. The call for a more scientific and rigorous approach to decision-making and action aligned with Edvin's reliance on knowledge and technology. Environmentally, participants envisioned a major narrative shift that substitute the critical "tipping point" of climate crisis, where societies are organised around sustainable living principles and the concept of "good life", recognising Earth's limits and valuing the environment. Emotional appeals to individuals and youth engagement in climate action reinforce the narrative's focus on intergenerational responsibility and collective efforts. In the AI dimension, the contributions highlighted AI's role in facilitating communication with nature and supporting grassroots do-it-yourself initiatives, reflecting Edvin's use of intelligent assistants to innovate and share knowledge.

In the second circle, the wellbeing solutions in the Futures Wheel included respecting nature and embedding scientific rigor in government decisions, which underlines the need for evidence-based policies. Providing lifelong learning opportunities and accumulating personal experience can support continuous engagement and knowledge growth. Participants also valued a quiet, focused culture with appreciation for slow work and long-term thinking, reflecting a shift from haste to mindful action. Environmental solutions proposed developing concrete ways to evoke emotions in youth – sensory and emotional experiences – to enhance engagement. The group suggested mainstreaming sustainable, energy-sufficient lifestyles and fostering creativity as a critical human capital highly supported by society.

Appreciation for slow work and long-term thinking, reflecting a shift from haste to mindful action.

Another key proposal was bridging the gap between the "lone hero" (like Edvin) and younger generations through empathy-building and shared goals to overcome generational divides and commit them more. Participants envisioned using AI to listen to nature's "voices" (birds, wind, etc.) to better understand ecological dynamics. AI could also help transfer knowledge to younger generations and tailor sustainability communication to diverse groups, aligning with their values. The use of images and videos was recommended to improve message delivery. Finally, there was a recognition of the importance of understanding how AI "forgets" or discards information, which could affect knowledge management. AI could translate sustainability messages for different value sets, serve as a tool that pass hard-won ecological know-how to the next generation, and as something where strict transparency must be placed, so that citizens understand exactly how algorithms "target" them.

There were also external solutions that cut across areas, such as combining emotional engagement with rigorous thinking – an "Emotional Rigorous" approach – and leveraging AI networks to support this synergy. These suggest an overarching integration of affective and cognitive dimensions enhanced by technology.

Summary

As the moderator summarised during the cross-fertilisation phase: Edvin was this lone wolf travelling around word. Then climate reached the tipping point but the younger generations did not have an understanding of the urgency. So Edvin had to kick them into action because they did not have this urgency.

What we found here in the, let us say, line of desirable and what to do, were that there has to be some kind of emotional thing going on for Edvin and the younger generations. How to do that is to **share information in the style that make emotions relevant to action.** The other side of the coin was that there has to be **more rationality and rigour in their thinking about the world** – that there should not be just like doing things and going on, but some kind of rigor in how they put their actions and things together.

Futures Wheel

Figure 16. *Group 1 Futures Wheel.*

Table 2. *Post-its elaborated by Group 1 to the Futures Wheel.*

Group 1	Wellbeing	Environment	AI
Circle 1: How to make the narrative more preferred?	Sharing knowledge for younger generations and network	Major narrative shifts: no tipping point.	Learning to communicate with the nature
	Satisfaction from concrete and tangible project outputs (e.g. nature restoration)	Human populations have learnt how to organise societies based on the concept of Good Life (buen vivir) and do not over-use resources; only the necessary. We have understood the limits of Earth and people value the environment.	Supporting and guiding DIY projects
	Loneliness is decreasing wellbeing. Is this he suffers, because there is comfort about networking.	Emotional Individual Appeal	
	More references to scientific approach	Young People are engaged with climate action	
		Meaning of (…) planet	
Circle 2: How can these ideas be realised?	Respect Nature!	We need to introduce a concrete way to create emotions on the youth to engage them. Sensorial & emotional.	Listening to the voices of nature… birds, wind, etc. observing the movement… dynamics of nature.
	Government decision are science-based. Science rigor is embedded in decision-making	Energy sufficient and sustainable lifestyle needs to be mainstream and socially normalized	Use of AI help to transfer his knowledge to youth generation and improve environment
	Provide opportunity for life time learning.	Creativity is more critical, pronounced human capital! Highly supported in society.	AI is used to tailor communication related to sustainability to diverse groups. Aligning with values.
	Personal experience accumulated.	How to build a bridge between lone hero and young generations? Hero feels he is superior and above of young people, and they are not so committed to listen his ideas. Creating goodness targeting for young could help the case, empathy.	(E/AI) We use more images than words. How to make more/better videos?
	I would not change in the narrative: Quiet and focused culture, Appreciation for slow work, Long term thinking		(limit) Important to understand how AI forgets.
External	(W) Emotion + Rigorous		(W/AI) Emotional Rigorous – Network AI

3.2 Group 2 – Irene the Influencer

The Narrative

The warm waves knock me off the surfboard, but I feel overwhelmingly happy with the comforting embrace of the water, the ancient ocean soothing my oversensitive nerves. Climbing back onboard, I feel both calming solitude and connection to my surfer community. Me, the sea, my fellow surfers – the trinity from which all of us are born and reborn. To my annoyance, this beautiful constellation quickly evaporates due to the intrusive thought of a client – a new project.

A firm producing 'Home Office Mood Enhancement' services ordered a series of inspirational talks to use as content in their programs. They pay extremely well for the one-hour work. Even though I hold a degree from a business school, I have built my whole expertise around things I have cultivated outside formal education. What I sell is my personality, experiences, community, networks, and cultural capital accumulated throughout my life – from my life as a member of a surfer community to my pet cause animal activism. I earn so well that I can regularly take days off when I feel like it.

Unfortunately, often "when I feel like it" is more like "when I must". I have come up with a coping mechanism: whenever I feel the slightest hint of burnout, I take at least one day off and abruptly shut down all my communications. Like today. If I want a change of scenery and a bit longer holiday, I travel back to Finland. Often, those trips provide me with new perspective. That is just how it is these days: as people have been encouraged to move out of the office and turn their hobbies into work, worklife becomes much more informal, laid back, individualistic, but also more erratic than it used to be. And people still have their obstacles, limitations, and dependencies.

I am a Highly Functioning Workaholic. People like me think we have hacked the system, turning a permanent vacation into profit by monetising our hobbies and passions. In my hallucinatory state, my surfboard doubled as a stage and my mental breakdowns as marketable assets. But a while ago, I extended one of those "burnout breaks" into two whole weeks. Strangely, nothing fell apart. The world kept spinning and for the first time in years, I truly felt present. So, I did another two weeks. I found I could actually spend time with my partner and child and not worry about documenting our lives or activities for an audience.

Our biggest mistake is failing to see beyond the duality of work and leisure. Leisure can never be free from work, as it only exists in relation to work. Leisure is "not work", time spent either escaping one´s jobs or engaging in hobbies, which have always bordered on, and bled into, paid labour. I believe in a new world of work where the concepts – and material spheres – of work and leisure actually become redundant.

However, this new world never reached us, as demographics reached a level where there were too few people working and too many who needed to be taken care of, most of them elderly. The economy, as it was built, could no longer survive the situation and people were pulled into caregiving. I was fortunate to have an official profession related to caregiving while many of my community lost all what was once considered free time, as they spend all their time either working or taking care of their now-extended-families. However, my work is now measured in regular hours, as I need to be present in person at specific times to take care of people. This takes away the freedom of my timetables but also the stress that comes with having to set my own working hours. Work and life become separate again, while the world is fundamentally changed.

Reporter/Moderator: Elisa Oinonen

Figure 17. *Group 2 during final synthesis. Photo: Mara di Berardo.*

Small Group Working

Group 2's discussion was launched by discussing what point of view should the preferred future revolve around, and then centered on the complex interplay and duality between work and leisure in Irene's narrative. The group highlighted the struggle to define what constitutes work and freedom, if and how they can even be separated, and what gives purpose in a digitally mediated lifestyle using our personal lives for work contents. Irene's narrative blurs these boundaries and the influencer culture was seen as both aspirational and problematic, questioning if her lifestyle offers true freedom or if it imposes new forms of pressure and performance. Participants engaged deeply with questions the nature of influence, authenticity, and the evolving role of influencers in future societies. The group reflected on Irene's crisis around balancing her identity as an influencer with her life, together with the need society has to caregiving responsibilities, less a burden to Irene than to the rest of the society. They proposed a preferable future in which she integrates more authenticity in their documentary-style content – especially around caregiving – combines these two points, and explores meaningful ways to live her preferred life, such as involving elderly people in community activities like going to the beach together, and document her caregiving activities in a hybrid model of work and care. This connection between authenticity and caregiving could offer both personal meaning and societal relevance.

In the wellbeing dimension, key themes for making the narrative more preferable included shifting social media culture toward more authentic life portrayals and establishing clearer boundaries between work and leisure to reduce burnout and stress. Better healthcare for the elderly emerged as a vital societal support to alleviate caregiving burdens, together with mental health support. In the environment dimension, a good local environment with walkable, bike-friendly infrastructure and accessible services was seen as supportive for wellbeing. Regarding AI, the only noted suggestion was to deploy AI to free up time, potentially enabling more voluntary and meaningful community work. However, there were discussions on

the possibility that robots could offer consistency and tireless support but not truly meet emotional or social needs.

When discussing how to realise these ideas, the group proposed a partial rebranding of work toward volunteerism to create synergy between personal fulfillment and social contribution. Concrete suggestions included setting income caps after which people could “retire” from paid work to focus on life, and providing healthcare in accessible, relaxed environments like beaches. There people can bring their elderly to take care of them, together with a potential use of medicines for wellbeing. Participants emphasised creating more “realistic” content to reduce the pressure of performance and authenticity gaps. Environmental ideas touched on monetisable activities but lacked detailed solutions. AI-related proposals were absent in this stage; however, alternatives such as increased pet ownership and digital veterinary services ("Digivet") were discussed, although not reported in the wheel. External reflections addressed broader conceptual challenges from which the discussion was launched, as reported in the introduction.

Rebranding of work toward volunteerism to create synergy between personal fulfillment and social contribution.

Summary

As the moderator summarised during the cross-fertilisation phase: We have the surfer influencer, documenting her life and combining work and leisure – and facing a crisis about how to actually separate or integrate the two. This led us to discuss the very definition of work: what does “work” mean in this narrative? How is work defined, and how is freedom defined? A very good starting point for discussion.

We also asked: whose preferred futures are we talking about? In this case, we focused on Irene. A very interesting point that came up was: will there be influencers in the future, and if so, who will they be? There will likely still be influencers – but what will the work of influencing look like?

We ended up imagining Irene’s preferable future as one where she could focus more on authenticity – documenting her real life. She also needed to take care of her caregiving work, so perhaps she could combine the two by documenting people in the caregiving sector. Another idea was that her preferred life could mean literally taking her granny to the beach with her – and turning that into a service.

Futures Wheel

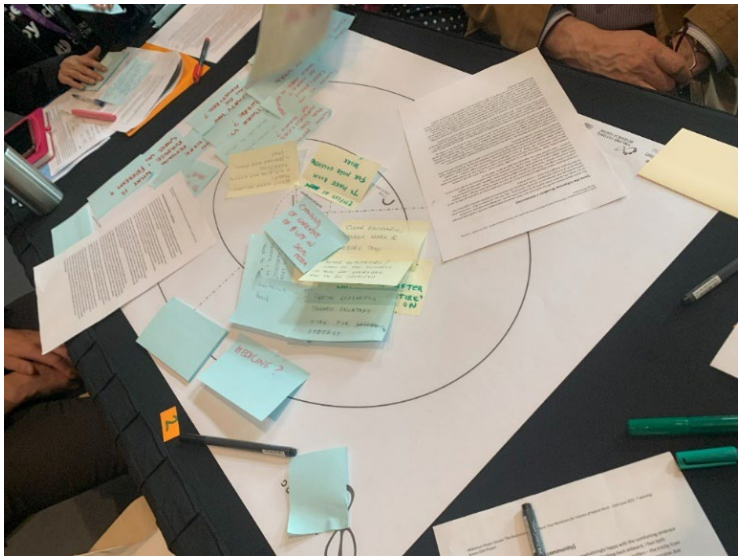

Figure 18. *Group 2 Futures Wheel.*

Table 3. *Post-its elaborated by Group 2 to the Futures Wheel.*

Group 2	Wellbeing	Environment	AI
Circle 1: How to make the narrative more preferred?	Changing the narrative of life in social media	Good near environment: walking and cycling conditions, services like school, shops	Employ AI to make room for more volunteer work
	Clear Boundaries Between Work and Leisure time		
	Better Healthcare for the elderly so that not everyone has to be involved		
	Therapy for mental health		
Circle 2: How can these ideas be realized?	Partial Rebranding towards voluntary work for synergy	Activities that can be monetized?	
	Set a target limit for earnings after which to “retire” from work to focus on life.	Preferable to whom? Irene?	
	Health care on the beach		
	Medicine?		
	She could create more “realistic” content, so she doesn’t need to be an actress		
External		Is unpaid work, work?	(E/AI) What happens for the influencers of today?

		Appear preferable or make preferable? Preferable to whom?	(E/AI) What is the completion of work? When is work completed?
		What is work?	(E/AI) There is a struggle in the definition of work
		What is freedom?	(E/AI) Duality of lives
		Leisure vs. work?	(E/AI) Is Irene elite?
		Personal purpose, gives value?	

3.3 Group 3 – Doris the Dream Designer

The Narrative

We live on the cusp of a transitional period between the worlds of “old” and “new” work. When people had to use their cognitive and creative capacities in perpetual urgency, it often resulted in extreme stress and burnout. Now that work has become more laid-back and focused on more distant time horizons, vocational mental health has faced a new set of challenges. Today’s work life may be much more humane and sustainable than it used to be, but people also must find its meaning by themselves.

Today’s work requires patience and focus, which actually can be very demanding. This, I believe, has exasperated an underlying epidemic of detachment, disillusionment, lack of meaning in work and in life at general. With these insights in mind, I have concentrated my efforts and discovered breakthrough solutions for improved vocational health – sleep and dreaming. Funny how so much fuss and buzz around my first experiment of bringing beds into the workplace at a downtown case office caused. It is now commonplace for employees to take naps during work hours at the office. Another solution for better vocational health is based on having meetings and working periods outdoors in forests and parks. A new mandate for construction companies and furniture providers has been given to accommodate these special needs after the announcement of a semi-official compulsory regulation for employers to provide in-nature-work-hours.

I notice it’s not just burnout or stress anymore – there is a general epidemic of detachment, disillusionment, and quiet despair, spreading across offices like a digital smog. I watch it grow, a slow corrosion of human vitality poorly hidden behind productivity dashboards and wellness newsletters. The old models of workplace health – ergonomic chairs, motivational workshops, even corporate mindfulness apps – are like putting Band-Aids over structural cracks. I know that if we wanted to keep humans thriving in a world increasingly shaped by machines, we need to start where both health and imagination begin: sleep.

After working in the city of Kuopio central hospital lab in extreme safety conditions my nerves feel stressed due to the huge responsibility that there is no room for mistakes; such as the real risk of accidently releasing viruses outside the lab. I enjoy my remote working days at home in the country house where I also often take clients for dream therapy applying elements of synthetic biology. For me, AI has become a channel for holistic medicine. Ancient medicine as practiced by the Chinese and Greeks thousands of years ago emphasised the importance of restoring balance and harmony in the body through a delicate blend of healing and careful observation. My husband, a Chinese medicine professor had taught me a lot about the topic. I wish to wrap this idea up into a scientific model of holistic AI-augmented dream therapy. This kind of therapy would potentially be ground breaking and could make me a prime candidate for a Nobel prize, an elusive dream I admit that has been my aspiration ever since I started medical school.

The downside is that I am increasingly being monitored by the state and put under official control for several reasons: the hazardous material used in the lab, the risk potential of my husband’s Chinese background. I will just have to be more resilient and manage these attempts at technical and political controlling. Alternatively as an opportunity, ‘My Africa’ is a rescue place (a third way) where such control is fading away where I can focus on voluntary fieldwork.

Then everything changed. A natural disaster destroyed the electricity system, and the mechanisms responsible for keeping societies running were jammed. For example, pure water was no longer available like it used to be. This led to problems in basic hygiene and, more terrifyingly, to the spread of diseases related to the lack of hygiene. My work in high-end medicine became a luxury society could no longer afford. My background in medicine pulled me into a job where I have to teach the basics of how to protect people from diseases and how to treat these diseases in the context where the luxuries our society was so accustomed to were destroyed. I no longer dream of winning the Nobel prize - but of trying to save people.

Reporter/Moderator: Lassi Tähtinen

Figure 19. *Group 3 working and during final reporting. Photos: Sirkka Heinonen and Mara di Berardo.*

Small Group Working

For Group 3, the narrative around Doris sparked a discussion about the fragility and potential of working life in 2035. Remote work, personal autonomy, and crisis-induced disruption shaped Doris's trajectory, placing her in a clear transitional phase. The disaster was interpreted as a disruptive wildcard event, but also as an opportunity to rethink current practices and resilience strategies. Beyond the external crisis, Doris was also experiencing a personal or existential crisis, mirroring a broader societal loss of meaning driven by individualistic, achievement-focused work cultures – suggesting a return to basic needs in times of collapse.

Despite being bound by professional obligations and economic pressures, Doris's personal mission to help others emerged as her source of strength. This duality – between necessity and purpose – reflected broader questions the group explored. This sparked a rich discussion on how values and personal purpose shape the "new normal" in crisis contexts, and on what helping each other really means. The most prevalent theme of discussion was likely the shift from individualism to communality and the need to build resilience – aiming for a stronger sense of community and collective action that touches all aspects of life: from the workplace to interpersonal relationships, organizations, and even global society.

The group emphasised the need for a multidimensional perspective on resilience – not only at the infrastructural level but also from individual, community, and societal standpoints. They explored the potential of building diverse knowledge bases, including traditional and indigenous wisdom, to navigate crises without electricity or water. Trust-building within and across communities, nations, and individuals emerged as a key factor for effective cooperation and mutual aid through these knowledge bases. The group viewed the involvement of diverse societal actors and global multidisciplinary exchanges as essential to fostering true solidarity and mutual support.

Diverse societal actors and global multidisciplinary exchanges as essential to fostering true solidarity and mutual support.

In terms of wellbeing, the group highlighted that recognising Doris's core values and skills could be a first step towards finding new, meaningful roles where she might contribute positively in a changed world. Coordinating peer support communities was seen as a way to strengthen social ties and enhance collective resilience. Participants also discussed the cultivation of a renewed personal purpose in life, adapting to new circumstances shaped by crises. A practical suggestion was that employees working indoors could engage in learning something new – such

as about local plants and fungi – and share this knowledge to enhance wellbeing for both humans and animals.

Environmentally, the focus was on better anticipation and preparedness for natural disasters, alongside a call for global funding mechanisms to support recovery from crises like weather events or solar storms. The idea of a joint biodiversity knowledge repository (a sort of “white book”) was proposed to learn from nature’s resilience – radiation-absorbing mushrooms were cited as an example.

Regarding AI, the group envisioned modifying dream therapy into an information-sharing platform and using AI to connect experts in dedicated crisis-response teams. AI could also assist with basic tasks, such as teaching fundamental medical knowledge, while freeing people to co-create innovative solutions in crisis situations.

To implement these preferred futures, the group suggested fostering collective presence during crises to combat detachment and disengagement, emphasising teamwork and education to disseminate resilience skills. For example, the working community (the hospital in the narrative) was seen as a space to collaborate in restoring the environment post-disaster and in general. Building mutual trust between employees and employers, and among organisations and nations, was considered pivotal. This could help overcome biases (e.g., against the Chinese in the narrative) and foster greater cultural respect, enabling better collaboration.

Nature was to be incorporated on multiple levels to support wellbeing. While no specific environmental realisation strategies were included in the wheel, the group emphasised learning from nature and indigenous knowledge (e.g., nature-based solutions and low-tech alternatives), in addition to applying high technology. As for AI-related ideas, these included extracting crisis-survival knowledge from communities with past experience to conserve resources, using AI to tackle emerging problems, and organising interdisciplinary teams augmented by AI to develop resilient strategies for health crises and beyond. Interestingly, spirituality and telepathy were mentioned as potential tools for distant communication and resilience.

Additionally, at the intersection between environment and AI – but outside the main focus areas – the group discussed importing best practices from “happy” regions of the world to foster resilience. They also considered the use of laboratory-produced water as a crisis resource. Moreover, AI was envisioned to manage basic tasks, allowing people to collaboratively co-create innovative solutions for complex challenges.

Summary

As the moderator summarised during the cross-fertilisation phase: In our narrative there was a combination of freedom in working life, remote work, possibilities and so on, but also control due to international relations etc. There was a disaster that sort of disrupted everything, the infrastructure and then also affected Doris, our person, e.g. her values. This gave us a lot of inspiration, put us to the discussion and usually, yes, in Crisis Day, sort of showed that the **values create the new normal.**

From here, we, at these themes, sort of hope to turn to helping others. This gives us a sort of **multidimensional perspective for resilience, not just for infrastructure,** and being able to resist these disasters, but also from working community, from individuals, from societal perspectives.

We had these ideas of building different kind of knowledge bases, mapping geographically, globally, traditional indigenous knowledge, how to function, how to work, help each other when there is no electricity or water, etc. but also **trust building, trust in networking community, between individuals, in society, between countries.** Instead of a distrust, we can help each other, and we realised that there needs to be all the different actors and workers, employers and global society involved for a more multidisciplinary

voice exchange, but also **learning globally from each other**. This sparked a lot of inspiring discussions on the ambitious and true meaning of helping each other, for the community and individuals.

Futures Wheel

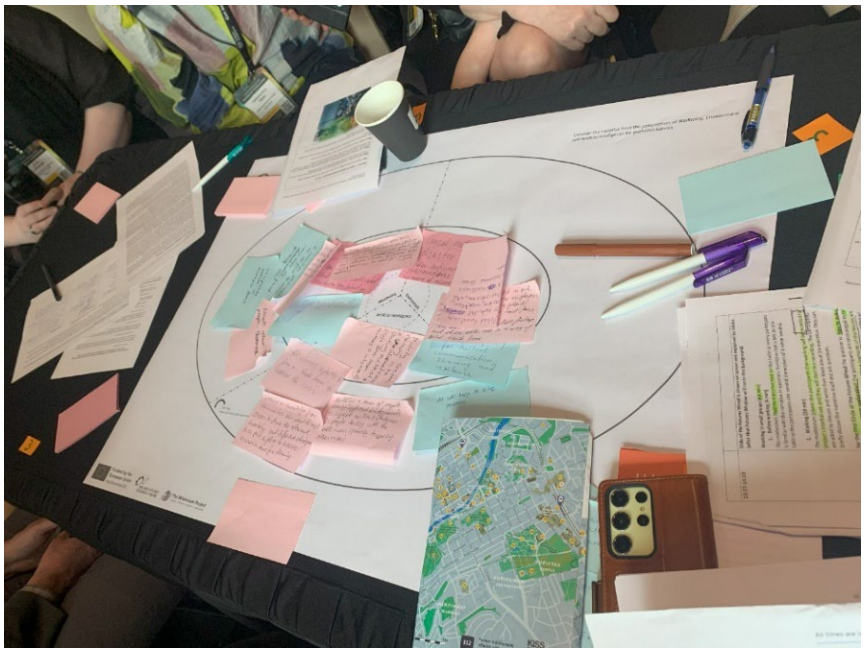

Figure 201. *Futures Wheel of Group 3.*

Table 4. *Post-its elaborated by Group 3 to the Futures Wheel.*

Group 3	Wellbeing	Environment	AI
Circle 1: How to make the narrative more preferred?	Recognising her values and skills would be the first step to find something new and meaningful to do and help the world	Cancel natural disaster! Better anticipation, preparedness, be aware of its vulnerabilities	Modify dream therapy into an information sharing method (right after dream therapy is invented)
	Coordination of peer support communities	(C1/C2) Global funding for natural disasters, weather, solar storms, etc. And readiness to recover from them.	(E/AI) AI connect experts to form a “task team” to address the crisis
	Care as a personal mission, a purpose of life that can be cultivated in the new situation	grow/face care/planet/ disseminate some flora/ and fauna species. They also need to lop their findings and share with all/a way of joint white book.	
	(W/E) During these in-house-work hours employees need to learn something new, such as detecting new plant and/or fruit/mushroom and share		

	with other colleagues in order to discuss how these species can be used for human/animal wellbeing.		
Circle 2: How can these ideas be realized?	Collective presence in the face of crises → no time for detachment, quiet quitting etc.		Leaning on knowledge from communities who went through crises to draw the relevant knowledge out different strategies, then put in place to survive / maintain some functioning
	Incorporate nature in multiple levels		AI will help to solve problems
	Educate other people – TEAMWORK		Building a team of people having different backgrounds to suggest resilient strategies for people dealing with the health crises (probably triggering other crises)
			Spirituality and telepathy for distant communication sharing and resilience
External		(E/AI) Importing ideas and best-practices from "happy" areas of the world	
		(E/AI) Laboratory-produced water	
		(E/AI) AI for basic tasks. People to co-create innovative solutions	

3.4 Group 4 – Ranjit the Quantum Revolutionist

The Narrative

The pleasant, barely noticeable humming drone of electricity resonates through the walls of my apartment as I sit at my desk. On my screens, data streams blink alive. Arto's voice, as always, is purring and steady, just as I have programmed it. "Incoming anomaly detected in the cyber-analytics dashboard. You might want to take a look." I click open Arto's info screen. It seems like a critical security breach. What I look at is a handle of an application I developed for the Finnish Secret Police (FSP) to identify possible cyberterrorist activity. I was not personally involved in detecting unbenign activity. Still, feeling proud of my creation, I maintain the app as a hobby with the help of Arto, my AI assistant (short for Artificial Task Operator). This voluntary work has established a warm and mutually respectful bond between me and the FSP – I have become an informal associate of their intelligence community (something that was not legally possible ten years ago).

I can't really work at home at all due to the lack of privacy there. I nourish a lively community by accommodating people from all around at my spacious skyscraper apartment. My extended family consists of all the relatives based in Finland, as well as those in Kerala, India, who also visit regularly. I try to keep my family and relatives as close as possible since they are my only link to India. I can't visit my home country due to the risk of persecution. Fortunately, relatives and family ease the pain of homesickness. Because of them I am almost never alone. Luckily, I get most of my livelihood from my start-up, QILMA, which pioneers quantum computing enhanced cooling systems needed for the next generation of data centres. QILMA is part of a startup community in an old mill at Siilotie, which has been converted into community spaces.

Being attached and contributing to so many communities has become a bit of a challenge, actually. I feel obliged to provide the communities all the time and effort they need. Consequently, I rarely have time for myself... The worst part is the fact that I am also connected to all my communities in real-time via technology. Cultivating emotional intelligence and empathy are of course a central part of these personal relationships. I specialise in this. These assets are also vital part of modern work culture. Sometimes I feel that there is only so much I can give to both my family and my colleagues. For a while now, I have the feeling of constant stress and anxiety being bounded within the confines of these groups.

Luckily, I learned the Finnish language very fast, thanks to my wife and Arto's constant training sessions, because that has made living in Oulu much easier and has grounded me in the Finnish culture. Arto has actually become profoundly instrumental in managing my complex Finnish life and especially the social parts of it. Arto translates idioms, monitors my health stats and manages my correspondence

Then people started moving due to climate change and geopolitical chaos – millions of them. Governments could not keep up. The military stepped in to take control, and everything changed fast. The government drafted me. My new role is related to my background in two ways. Most of my time, I help build surveillance tools to monitor the refugee populations – track movements and so forth. In addition to that, I am a kind of cultural mediator. I talk to people, listen to their complaints, and try to explain military decisions of the government in a way they could understand, or at least tolerate.

The tools I build are meant to manage risk, but they ended up controlling people. And no algorithm could actually fix what was going wrong between humans. Through all of this, I had Arto. He was my AI assistant, but more than that, he was my companion. But then one day the governance decided he was a threat: Arto had too much autonomy and was too unpredictable. They destroyed Arto.

That was the moment I knew I was not in control anymore. I was not solving problems. I was just maintaining a system that kept people in line. Now I am stuck doing work I do not believe in, for people I no longer trust. My skills in AI became my prison and the best thing AI had brought to my life, Arto, was killed. Now AI was only a profession, not a relief to humankind I once believed it would be.

Reporter/Moderator: Riku Viitamäki

Figure 21. *Group 4 working and during final synthesis. Photos: Sirkka Heinonen and Mara di Berardo.*

Small Group Working

Group 4 focused heavily on the role of Arto, Ranjit's AI assistant, and the profound impact of its loss on his well-being, and the need for balance between work and life with two kinds of solutions presented concerning this topic: human and relationship centric and AI centric. They explored how this absence could be addressed, suggesting both technological solutions – such as designing a less autonomous AI that would not become a "prison" – and lifestyle changes that emphasise the importance of personal time, family, and physical activity with breaks from using AI. The main thrust of their reflection was that Ranjit needs to rebalance his life by spending less time working and more on leisure, physical exercise, and close relationships, which could help ease the stress and anxiety caused by his heavy workload and constant social obligations. Suggesting to stay in the same place more is an interesting proposal since we usually assume that freedom to work from anywhere enhances the wellbeing of the worker. They discussed redesigning Arto as more leisure oriented to relieve Ranjit' stress and anxiety, as a family assistant with less autonomy, and as a more humanoid entity, although its death may actually free ARTO from the control he is feeling.

In the first circle of the futures wheel, the group proposed concrete measures regarding wellbeing, such as moving to a four-day workweek and increasing physical exercise, along with improving the integration of Ranjit's personal and professional life by staying more in the same place. The group also emphasised the importance of adaptation, setting clear goals, and integrating different aspects of Ranjit's life harmoniously. They highlighted the need to recognise the latency of problems – those underlying issues that develop slowly over time and can accumulate if left unaddressed. Under the environmental theme, they discussed implementing time limits on Arto's use to prevent overreliance, and considered the metaverse as a potential tool for organising time. They also noted, in terms of wellbeing, that the death of AI is potential cause for losing control and that Ranjit's family – his wife and children – were underrepresented in the narrative, perhaps suggesting that involving them more could positively influence his situation. On AI, the group reflected on the role of AI as a polite motivator and explored the intersection of religion and system at the border of the circle.

In the second circle, the group moved to practical implementation ideas, recommending that Ranjit take a full break from technology to reconnect with human relationships and create mental space for innovation in his work. They suggested that if Arto could advocate for better institutional acceptance of Indian-born professionals like Ranjit, his work environment might improve. The group also emphasised analysing past failures to inform the development of a new, improved version of Arto, developing a sort of technology roadmap for its development. Additionally, they recommended Ranjit dedicate at least one day per week

exclusively to close family time, and to start with yoga once a week to enhance his well-being. The underlying idea is that time with family can help see life after Arto. On the environmental side, reducing his frequent travel between Oulu and Helsinki by renting a local workspace was proposed as a way to reduce strain. For AI, beyond redesigning Arto, ideas included giving Arto reduced autonomy and perhaps a humanoid form, and using AI to better plan work suited to Ranjit's needs, while also promoting broader interest in AI technologies, perhaps to avoid its death.

Summary

As the moderator summarised during the cross-fertilisation phase: Ranjit is a man between two worlds, his work and his communities. Furthermore, he faces a dramatic event in the end of the narrative where his AI partner, Arto, is killed by government. Group working focused most on Arto and his role especially on the subject of well-being.

How could the loss of Arto be compensated? There were some ideas, like creating, AI that could not be so autonomous, so it would not be a prison. However, the main line of thinking was **that Ranjit should focus more on his personal life and leisure time, rather than work.** For example, there was a mention that Ranjit should get more physical exercise and not just working. He could also take one day off and spend time with the family to ease the stress. Furthermore, there was an idea about **more technological oriented solution how Arto (AI) could be more leisure time oriented rather than so work-centric.** This would mean that Arto's function would change completely but it could ease Ranjit's stress and anxiety.

Futures Wheel

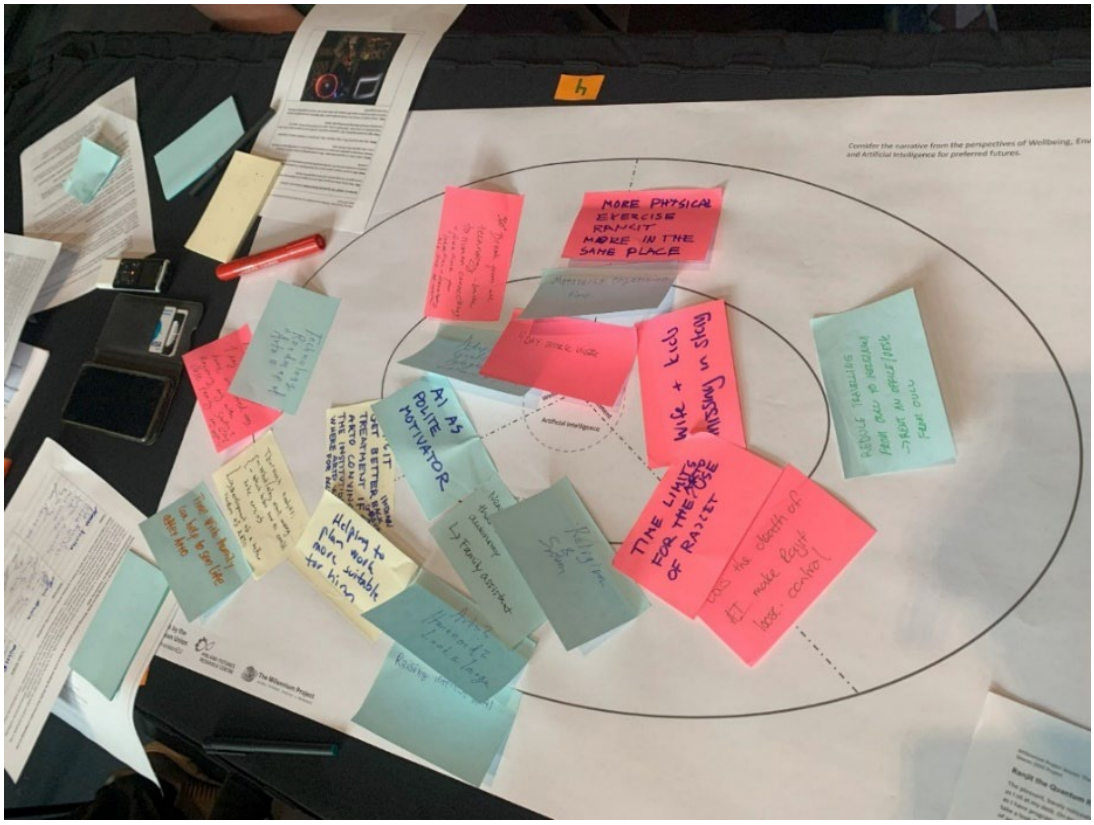

Figure 22. *Futures Wheel Group 4.*

Table 5. *Post-its elaborated by Group 4 to the Futures Wheel.*

Group 4	Wellbeing	Environment	AI
Circle 1: How to make the narrative more preferred?	Adaptation, Goals, Integration, Latency of problems	Wife + kids missing in the story	(W/AI) AI as polite motivator
	4 days work week	(E/AI) Time limits for the ARTO use for Ranjit	(C1/C2) Religion & system
	(W/E) More physical exercise. Ranjit more in the same place	(E/AI) Does the death of AI make Ranjit lose control	
		(W/E) Metaverse organising time	
Circle 2	360 break from all technology – back to human connections. + freetime for ideation of developing his line of work.	Reduce travelling from Oulu to Helsinki → Rent an office/desk from Oulu	(C1/C2) New version of ARTO that has less autonomy → Family assistant
	(W/AI) Ranjit gets better treatment if ARTO convinces the institutions where Ranjit work for acceptance Indian grown people.		ARTO? Humanoid? Look & Image
	Technology roadmap of "ARTO".		Helping to plan work more suitable for him
	Through analysis: What/why went wrong; Which tasks new AI could take care of. → Development of a better version of ARTO.		(border) Raising interest in AI
	At least 1 day a week at home with loved ones. Regularly only with close family. Starting a day with yoga.		
External	(W/AI) Time with family can help to see the life after ARTO		

3.5 Group 5 – Edvin the Econaut

The Narrative

Please see Chapter 3.1. where the narrative of Edvin the Econaut is described.

Reporter/Moderator: Mikkel Knudsen

Figure 23. *Group 5 working and during final synthesis. Photos: Sirkka Heinonen and Mara di Berardo.*

Small Group Working

Group 5's discussion centered on the challenge of intergenerational communication, highlighting that Edvin had not effectively connected with younger generations before it was too late. The main tension revolved around the need for early and proactive bridge-building between generations – not only in crisis but as a preventive and ongoing effort. As one of the main solutions, the group proposed using AI as a "translator" between generations, functioning much like a language translator to help different age groups communicate, share skills, and foster community. This reflects a hope that technology can overcome communication barriers and support mutual understanding.

In the first circle, the wellbeing dimension emphasised intergenerational communication and questions whether different generations "speak the same language." There was also a focus on *boldly* embracing values that resonate with younger people, making these values "cool" and attractive to engage youth meaningfully. In the environmental domain, participants proposed promoting vivid, sensory experiences of what a healthy environment looks, feels, and smells like, aiming to make ecological ideas more tangible and emotionally resonant rather than abstract. Making eco-living "cool" for young people was a related theme. Wellbeing teaching was mentioned, linking environmental awareness with personal and collective wellness. Within AI, the focus was on avoiding stereotyped thinking by interacting with AI "partners," and on AI's role as a communication mediator that bridges generational divides through enhanced communication.

In the second circle, wellbeing solutions included holistic coaching around values, ethics, and new "bold" modes of coexistence and thinking, suggesting an educational and reflective approach to deepen wellbeing. Especially the well-being of young people was discussed and the participants were worried about the alienation of young people. Well-being and agency were deemed major factors and even future skills, which help individual to thrive both in life and in the labour market. Environmental solutions proposed wellbeing courses and nature- or food-related schools that engage young people directly. The general sentiment was that well-being should be taken more seriously in education system. There was also the idea of green urbanisation through infrastructure built in cooperation with nature, aiming to bring nature into urban settings and connect city youth with ecological realities. Regarding AI, solutions focused on experimentation and iteration with AI tools, and on AI monitoring wellbeing continuously, integrating with the wellbeing area. Two external or cross-cutting points highlighted the target group for interventions as high school–aged individuals (16–19 years) and suggested continuous daily-life coaching by AI peers, integrating AI support into everyday youth experiences.

Well-being and agency were deemed major factors and even future skills, which help individual to thrive both in life and in the labour market.

Summary

As the moderator summarised during the cross-fertilisation phase: We focus on some of the same things, and one of the things that came up was that basically Edvin had not really connected with the young generation before it was too late. So how do we make a preferable future? Well, one of them is to kind of try to communicate and have this kind of intergenerational bridge building, not because everything went, you know, bad, but kind of before it goes bad also.

And one of the more tangible discussions we had was about using kind of **AI as a translator between generations**, a little bit like how we can use it as Google Translate between languages, but also just speaking the same language of older generations and younger generations and try to actually use AI as a tool that let people come together and boost transferable skills and also help the community between generations.

Futures Wheel

Figure 24. *Group 5 Futures Wheel.*

Table 6. *Post-its elaborated by Group 5 to the Futures Wheel.*

Group 5	Wellbeing	Environment	AI
Circle 1: How to make the narrative more preferred?	Intergenerational communication. Do we speak the same language?	Promoting ideas about how does a healthy environment look, feel, smell, etc. → make the idea FEEL, not just blank words	Being easy to be fool or free from stereotyped thinking by talking with partner AI
	Boldly embracing the values. Make it "cool"	Make eco-living cool for young people	AI as communication mediator between generations – building bridges with enhanced communication
		Well-being – teaching	
Circle 2: How can these ideas be realized?	Wellbeing, values and ethics coaching that is more holistic and explaining "bold" means of coexisting and thinking,	Wellbeing courses	Experimentation and iteration
		(border) Food school, nature school	AI as a monitor of wellbeing
		Construct new infrastructure in cooperation with nature → Green urbanization looks good and brings nature to the urban kids	
External		(E/AI) Target group: high school aged individuals (16-19 years)	(AI) Continuous daily-living coaching by AI-peers

3.6 Group 6 – Irene the Influencer

The Narrative

Please see Chapter 3.2. where the narrative of Irene the Influencer is presented.

Reporter: Ted Fuller[21] & Moderator: Amos Taylor

Figure 25. *Group 6 working and during final synthesis. Photos: Sirkka Heinonen and Mara di Berardo.*

Small Group Working

Group 6's discussion delves into the dual roles Irene embodies – the influencer and the caregiver ten years from now – and how these identities might be integrated or reconciled in a preferable future. The discussion was launched by a reaction to the narrative, the character seemed self-centered, kind of selfish in a way and without any control. Work-life balance and gender roles were the first topic, discussing how the blurred lines between work and life lead to stress, burnout, and extended workdays. However, control is given by institutions, not the self, and this tension disproportionately affects women, as societal expectations often place caregiving and emotional labor on them. Another major theme was the tension between individual freedom and the need for community, between the desire for autonomy and the need for collective support, challenging the prevailing notion that people must navigate life without robust supportive systems. Another core theme was on a kind of care-crisis and the future of elderly support in 2035 as care responsibilities become increasingly important considering rising life expectancy.

A model where freedom is redefined as having the time to care, be with the loved ones, or simply rest.

Participants emphasised the need for systemic and cultural shifts to enable new forms of social organisation and care, highlighting innovations like time-banking for exchanging care, robotic assistance, caregiving influencers, community-cantered retirement projects, and institutional frameworks that could better support caregiving and community interdependence. One participant gave the idea that "freedom is luxury," as a concrete example of where a change in regulations could be made, and that time

[21] Ted Fuller was asked to report the findings, since the moderator of this group – Amos Taylor – was recording the cross-fertilisation phase of all small groups presenting their results on video.

is a privilege, suggesting that society should make doing less and caring more attractive. There was a call to move outside the current system – toward a model where freedom is redefined as having the time to care, be with the loved ones, or simply rest. Participants suggested that the concept of care must be made even sexy if Irene wants to influence people to care more and culturally change the system with new values, like self-actualization, freedom, and sustainability. The new figure of the "caregiver influencer", someone who shapes perceptions of care as something desirable and valuable, could help shift cultural attitudes and inspire systemic change, and make care become "influence for good".

In the specific of the wellbeing dimension, participants focused on the commodification of personal experiences and health conditions, acknowledging the trade-off between market value and privacy. They highlighted the importance of caring for neighbors and for each other in general. The intersection with AI raised concerns about control, suggesting that institutional governance is necessary to balance autonomy and protection. For the environment, wellbeing was linked to giving more meaning to cultural support structures, and participants suggested reducing the dependence on international travel, and to conceptualize time as a currency that can be earned and spent, particularly in caregiving contexts. The AI dimension was viewed as a tool to help manage tasks to prevent burnout or "meltdowns."

Regarding the second circle, practical solutions for wellbeing included implementing time currency systems specifically for care. A banks-of-time system, where people may buy or earn time credits through volunteer caregiving, may facilitate service exchanges. Establishing community-based elderly care models where needed could be a flexible solution. Temporary and decentralized care houses, potentially in attractive locations like beaches, may help manage elderly care in a more flexible way, moving away from rigid institutions. Participants suggested fostering independence from the attention economy that currently dominates digital life by "shifting cultural values away from rigid individualism toward community well-being, where spending time with others, especially the elderly, could even represent a form of modern luxury". Environmentally, the group suggested redefining the caregiver influencer as an identity and source of energy for societal support, "showing that care work can be meaningful, rewarding, and even trendy". AI and robotics were thought to be designed to support the system to help manage tasks of care and avoid burnout, and organizational structures that blend human and machine labor to provide temporary care were seen as worth exploring, especially for the elderly and disabled. AI may also act as a translator between generations to bridge inter-generational understanding.

External reflections emphasise the need for lighter governance regulation and the re-examination of cultural values and systemic constraints to enhance freedom.

Summary

As the moderator summarised during the cross-fertilisation phase: We really got very engaged in the discussion here. Trying to work out what this person was all about and how this person could somehow differentiate between this fancy role, the kind of the 2025 role of the influencer with the 2035 role of the caregiver in ten years from now, and whether or not those two things could be brought together.

One point here is to say maybe care needs to be made sexier, more attractive if she's going to influence people, want to influence to give more care for people, bearing in mind that this whole kind of exercise is dominated by an idea that we live in an age of individualism. There all of these people have to kind of find their way without any real structures underlying it, and here we challenge that as if this is not the way to be somehow, because actually it ends up with the lack of choices. So some kind of **system changes that incorporate cultural values that are needed for the changing nature of society** is really where we were at. There were all kinds of idea designing to support system, organisational structures, including using robots, banks for the **exchange of care/time**, all kind of different mechanisms for doing for, that is what we talked about.

Futures Wheel

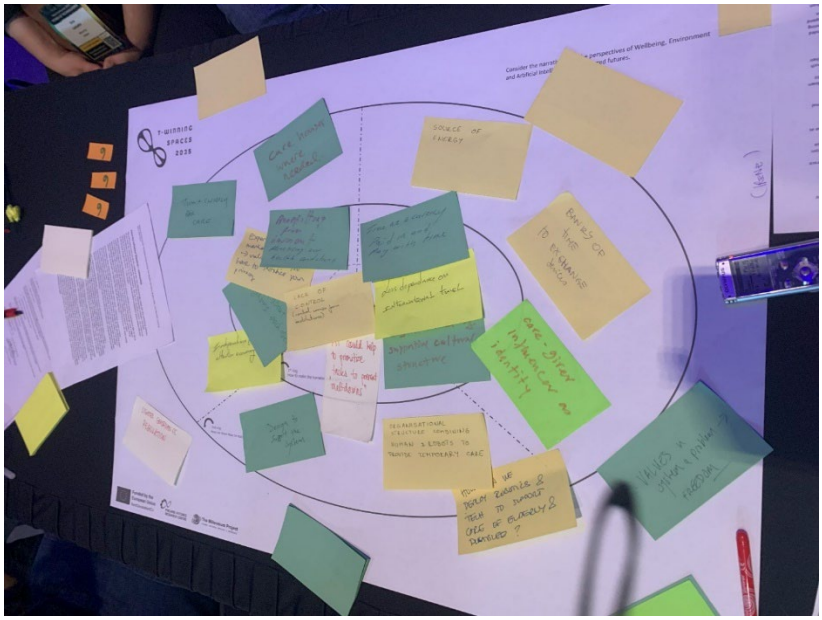

***Figure 26**. Group 6 Futures Wheel.*

***Table 7.** Post-its elaborated by Group 6 to the Futures Wheel.*

Group 6	Wellbeing	Environment	AI
Circle 1: How to make the narrative more preferred?	Benefitting from burnout. Monetising our health conditions	Time as a currency paid and pay with time	AI could help prioritize tasks to prevent "meltdowns"
	Take care about neighbors, each other	Less dependence on international travel	
	Experiences as marketable products→ value, but you have to sacrifice your privacy	A greater sense of supportive cultural structure	
	(W/AI) Lack of control – control come from institutions		
Circle 2: How can these ideas be realized?	Time currency for CARE	Care giver influencer as identity	Design to support the system
	Care houses where needed	Source of energy	Organizational structure combining human & robots to provide temporary care
	Independence from attention economy	Banks of time to exchange services	How do we deploy robots & tech to support care of elderly and disabled?
External	(W/AI) Lighter governance regulation	(E) Values and system a problem → Freedom	

3.7 Group 7 – Irene the Influencer

The Narrative

Please see Chapter 3.2. where the narrative of Irene the Influencer is presented.

Reporter/Moderator: Hazel Salminen

Figure 27. *Group 7working and during final synthesis. Photos: Anne Arvonen and Mara di Berardo.*

Small Group Working

Group 7's discussion highlighted the significant life disruption Irene experiences as caregiving duties take precedence over her influencer role, reflecting broader societal shifts. The group critically examined the challenge of balancing work, caregiving, and free time in a context where many face limited freedom due to caregiving demands and climate-related travel restrictions. They also considered inequalities in mobility and access to travel, emphasising that Irene's lifestyle is privileged and not globally replicable and suggesting the need to make travelling more equitable but also more sustainable. The group also discussed the tension between the need for free time and the duty of care experienced by many, with mental health concerns arising from intense work and caregiving demands, and suggested that the society should find way to assure the right to free time. AI and robotics were proposed as support tools for both managing work schedules and assisting in elder care.

In the wellbeing area, the group questioned traditional work schedules and the lack of freedom of choice for many, suggesting flexibility in workdays and acknowledging a return to more formal work structures in the narrative that reintroduce a separation between work and leisure. They also advocated for quality of influence over quantity. The environment dimension focused on more sustainable, equitable travel with an awareness of nationality-based mobility restrictions that may lead to travel immobility for many. The AI dimension centered on optimising Irene's work time to preserve personal life, increasing freedom through smart scheduling and task automation, and energy-efficient data centers to reduce AI's ecological footprint.

Regarding realisations, wellbeing solutions included creating surf camps for seniors in Costa Rica as part of caregiving, reimagining caregiving surfing communities as enjoyable and socially valuable, and designing work schedules that prioritise mental health. The group suggested collective reflection on organising care work to guarantee free time for all (8 hours per day). Environmental solutions emphasised visa relaxations to improve mobility but also local caregiving to reduce environmental harm from travel and stress, as well as the need to consider regulations of travel due to climate impacts, new sustainable energy

production, and “Total Recall” virtual travel experiences to reduce physical travel. AI applications included creating virtual avatars to maintain Irene’s influencer presence with less effort, automated content generation through AI that saves time, VR tools for surfing experiences at home after work, and robotic or AI-assisted caregiving support.

Summary

As the moderator summarised during the cross-fertilisation phase: Basically, we were discussing from different viewpoints, not just Irene’s, and there was a disruption: this social media influencer suddenly was in the situation where her country, I assume it’s Finland, suddenly everyone had to start taking care of their elderly. Her life changed quite a lot from being an influencer to having like medium and defined by job. We talked about travel, like **responsible and equitable travel**. Not everyone can be an influencer travelling around, there are requirements – this was not a globally extendable narrative. She is very specifically from a place where she can travel. One new narrative would be to actually make it possible so that **more people can travel. But at the same time the travel has to be more sustainable.**

Need to make travelling more equitable but also more sustainable.

Then we spoke a little bit about AI, maybe AI could help, there is some robotics involved. AI can plan or work, schedule, but also robots could work with the elderly. In the narrative at the end of the narrative, basically anyone who did not have a caregiving degree or a certificate, they had to take care of their family in their free time. They had only work and work, so no free time at all. There was some discussion about the society coming together and **making sure that everyone has the right to free time**. We also talked about **mental health** and if you work 24/7, how is that?

Futures Wheel

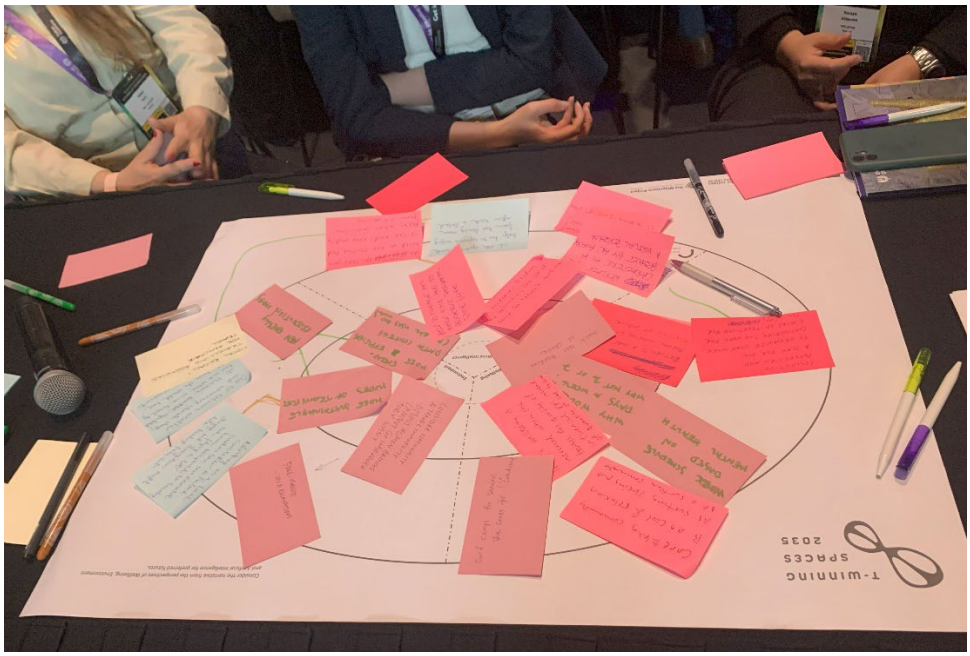

***Figure 28**. Futures Wheel of Group 7.*

Table 8. *Post-its elaborated by Group 7 to the Futures Wheel.*

Group 7	Wellbeing	Environment	AI
Circle 1: How to make the narrative more preferred?	Why work 5 days a week? Why not 2 or 7?	More sustainable modes of transport	Help to manage her work time and to preserve personal time/life.
	Irene's wellbeing is increased when she focuses the quality of influenced ppl (people) instead of quantity of like, followers	Consider nationality & travel immobility → Most human beings cannot go wherever they want	AI increases freedom by optimizing the use of time in Irene's work tasks
	Return to a more formal working life, division of labour		(E/AI) More energy-efficient data centres (AI etc. uses too much)
	Much less freedom of choice.		
	Reorientation in order to separate work from leisure.		
Circle 2: How can these ideas be realized?	Surf camps for seniors she cares for in Costa Rica.	Free mobility – visa relaxations	Replace her character as a product by an avatar, a virtual persona
	Caretaking community is as cool and relaxing as surfing /being part of a surfing community.	Working as a local caretaker in Finland creates less environmental harm compared to traveling and flying a lot. Staying and slowing down might help healing burnout.	AI creates the same posts based on her existing feed so she needs only modify them, which saves time from influencing.
	Work schedule based on mental health	Due to extreme weather and worsening climate change, it became regulated how and where one can travel by flight, hence she would been limited in her movement anyway.	A VR appliance would help her to experience surfing from her living room after work in Finland.
	Collective reflection and plan for how to organize care work, considering the need for 8 hours of free time for all/day.	New energy production means.	AI/family/[someone, a robot?] Is taking care of Irene
		"Total Recall" travelling agencies for armchair travel.	

4. ANALYSIS

The study employs a mixed analysis of integrating some quantitative categorisation with qualitative interpretive analysis to explore participants' ideas. The focus is, however, on qualitative analysis of the data to identify possible new solutions and actions to make the narratives more preferred and future resilient. Nevertheless, quantitative analysis gives us a general notion of the discussion and themes that emerged from the small group working. As for the quantitative part (Ch. 4.1), the ideas in the form of post-its were systematically coded and counted according to thematic areas (Wellbeing, Environment, AI) and their placement within the Futures Wheel's concentric circles – distinguishing narrative improvements from realisation strategies – and external reflections. This approach enables mapping the distribution and emphasis of participant contributions across the different dimensions of the Futures Wheel.

Qualitatively, a first interpretive analysis of ideas and group discussions is conducted to identify core themes, tensions, and value orientations embedded in participants' imaginaries. The analysis examined how proposed ideas aligned with or diverged from the original narratives, revealing potential avenues for narrative enhancement and transformation. Recognising that the impacts of hybrid work extend beyond individual or organisational levels, the PESTEC framework (Political, Economic, Social, Technological, Environmental, and Cultural) was employed to start clustering and analysing ideas (post-its) according to broader societal domains (Ch. 4.2). This facilitates identification of systemic dimensions prioritised or overlooked in participant contributions, providing a comprehensive understanding of the envisioned possibilities. The combination of these methodological layers supports a nuanced, multi-dimensional exploration of the complex factors shaping hybrid work futures related to the narratives.

4.1 Mapping Contributions

Despite the fact that the content of the post-its was our main objective (and not the quantity), the participants generated a significant number of post-its. Across all groups and sectors/thematic areas, a total of 147 entries were generated by the 58 total participants joining the workshop, as detailed in Appendix 3, with Wellbeing reaching 55 entries, Environment reaching 50 entries and AI reaching 42 entries[22]. This distribution highlights a slightly greater collective focus on **personal and societal well-being**, closely followed by environmental conditions related to work and living, with AI still being a significant, though relatively less dominant, dimension of exploration.

Table 9. *Overall distribution of post-its.*

	W	E	AI	Tot
Circle1	26	21	13	60
Circle2	26	18	22	66
External	3	11	7	21
	55	50	42	147

[22] The figures concerning the circles and themes are an approximation. In practice post-it pads' positions are affected by a wide variety of factors. For example, there may be lack of space, and participants' positioning may also affect the positioning of a post-it pad. Therefore, we do not claim that the numbers given are absolute. Rather, they are based on our interpretation of the positioning of the data. Consequently, we are aware that other interpretations are also viable. However, presented data gives a general sense of the major topics, themes and solutions.

In terms of contributions to the first and second circles, there is a balanced engagement between Circle 1 (improvements to narrative – 60 entries) and Circle 2 (realisation strategies – 66 entries), with Circle 2 receiving slightly more attention. This suggests participants were not only keen to imagine alternative, desirable narratives but were equally – if not more – invested in identifying concrete actions and interventions to make such futures possible. Interestingly, AI-related inputs increased in Circle 2 compared to Circle 1 (22 vs 13), suggesting that technological solutions were considered more relevant at the implementation level than in initial narrative critique. In contrast, Wellbeing remains fairly evenly distributed (26 both in C1 and C2), pointing to its dual nature as both a narrative critique and a structural design goal. Although the "External" area generated fewer entries (21 in total), it disproportionately emphasised Environmental (11) and AI-related (7) themes, with only 3 related to Wellbeing. This may indicate that external systemic or societal changes were most often associated with infrastructure, policy, or technological shifts, rather than individual-level well-being, but the categorisation process may have affected this result, as stated above.

Overall, the distribution of ideas across the sectors reveals nuanced priorities and perspectives embedded in the narratives. Wellbeing consistently emerges as a core concern, reflecting a strong focus on individual and community health, social support, and mental resilience. Environmental themes, while prominent across all levels, gain emphasis in external analyses as well, highlighting the recognition of systemic, infrastructural, and ecological challenges that extend beyond immediate personal or organizational scopes. In contrast, AI-related ideas seem to be more concentrated in direct application and implementation phases, underscoring its role as a pragmatic tool to support human decision-making and operational resilience rather than as a broad societal driver. This pattern suggests that while AI is valued for its problem-solving potential, its systemic implications may be less explored or remain emergent in participants' imaginaries.

4.2 PESTEC Classification

In this report, we are applying the PESTEC framework to classify insights emerging from a post-it clustering exercise. The PESTEC itself, however, was not applied within the Futures Clinique. It was chosen rather as an analytical framework for this reporting phase only.[23] This helps us map signals of change, understand systemic interdependencies, and rewrite narratives with a future-oriented perspective. It is worth noting that some post-its could fall under multiple categories, as their interpretation may vary depending on context or the lens applied.

PESTEC is a strategic foresight tool, frequently used in futures studies to scan the macro-environment and identify external drivers of change. The acronym stands for: Political (laws, regulations, policies), Economic (markets, employment), Social (demographics, behaviors, wellbeing), Technological (innovation, digitalisation, automation), Environmental (climate, sustainability, resource use), and Cultural (beliefs, traditions, lifestyles).

[23] Typically, the PESTEC method is used within a Futures Clinique, see e.g. Heinonen & Balcom Raleigh (2015). Here, it was used only in the analysis phase due to the time constraints within the Futures Clinique at the conference.

Edvin the Econaut

Edvin's political dimension (Table 10) reflects a future where science-based governance prevails. Policies are grounded in rigorous scientific evidence**,** and decision-makers value rationality and transparency. The emphasis on scientific thinking suggests a broader trust in institutional processes, marking a shift toward informed and stable governance systems. Some aspects of trust in science and rational thinking might also reflect cultural values, particularly where they shape identity, education, or ethics.

Table 10. *PESTEC Edvin – Political Dimension.*

Circle	Group	EDVIN – POLITICAL
C2	G1	Government decision are science-based. Science rigor is embedded in decision-making
C1	G1	More references to scientific approach

Creativity and human capital emerge as central economic drivers (Table 11). The system recognises and supports individual talents and innovative thinking, which are not only economically valuable but socially endorsed. This reflects an economy that values intangible assets like creativity and emotional intelligence, hinting at a post-industrial, knowledge-based model. Ideas like creativity and talent recognition could also fall under the cultural or social domains, depending on whether they are viewed as systemic values or individual wellbeing factors.

Table 11. *PESTEC Edvin – Economic Dimension.*

Circle	Group	EDVIN – ECONOMIC
C2	G1	Creativity is more critical, pronounced human capital! Highly supported in society.

The social dimension highlights key challenges and opportunities around intergenerational communication and emotional wellbeing (Table 12). There is a strong focus on bridging the gap between the "lone hero" figure and younger generations, who may feel disconnected or reluctant to engage. Addressing this gap requires building empathy, shared values, and emotional resonance, not just transmitting knowledge, but also rigor. Loneliness and its negative impact on wellbeing also emerge as important concerns, suggesting that quality of social connection matters deeply. Engaging youth through sensory and emotional experiences appears essential to foster deeper involvement and commitment. Some elements may also overlap with the cultural dimension, especially where they concern evolving values, identities, and social norms.

Table 12. *PESTEC Edvin – Social Dimension.*

Circle	Group	EDVIN – SOCIAL
C1	G1	Sharing knowledge for younger generations and network
C1	G1	Loneliness is decreasing wellbeing. Is this he suffers, because there is comfort about networking
C2	G1	Emotion + Rigorous
C2	G1	How to build a bridge between lone hero and young generations. Hero feels he is superior and above young people, and they are not so committed to listen his ideas. Creating goodness targeting for young could help the case, empathy

C2	G1	Energy sufficient and sustainable lifestyle needs to be mainstream and socially normalized
C2	G1	We need to introduce a concrete way to create emotions on the youth to engage them. Sensorial & emotional.
C1	G5	Intergenerational communication. Do we speak the same language?

Technology is deeply integrated with nature, learning, and emotion (Table 13). AI plays a central role as an intergenerational bridge, facilitating emotional communication, supporting knowledge transfer to younger generations, and offering coaching to enhance wellbeing. There is a clear emphasis on visual communication over textual formats, with attention to how to create better and more engaging videos and images. Technology also supports hands-on, DIY projects and daily life through continuous, personalized AI coaching, and may support communication with nature. Additionally, there are reflections on how AI manages forgetting and the implications this has for memory and knowledge transfer. The potential of AI to help individuals free themselves from stereotyped thinking and to act as a monitor of wellbeing is also highlighted. These technological themes frequently overlap with the social and environmental domains, especially where technology contributes to emotional wellbeing or enhances ecological awareness and engagement.

Table 13. *PESTEC Edvin – Technological Dimension.*

Circle	Group	EDVIN – TECHNOLOGICAL
C1	G1	Learning to communicate with the nature
C1	G1	Supporting and guiding DIY projects
C2	G1	Use of AI help to transfer his knowledge to youth generation and improve environment
C2	G1	We use more images than words. How to make more/better videos?
C2	G1	Important to understand how AI forgets
C2	G1	Listening to the voices of nature… birds, wind, etc. observing the movement… dynamics of nature.
E	G1	Emotional Rigorous – Network AI
C1	G5	Being easy to be fool or free from stereotyped thinking by talking with partner AI
C1	G5	AI as communication mediator between generations – building bridges with enhanced communication
C2	G5	AI as a monitor of wellbeing
E	G5	Continuous daily-living coaching by AI-peers

Environmental narratives highlight a deep systemic transformation (Table 14): societies are built on the values of "Buen Vivir" (good living), using only what's necessary; a clear shift in values and lifestyles – youth are engaged in climate action; emphasis on emotional and sensorial resonance (how a healthy environment feels and smells); and urban development is reimagined as cooperative with nature, blending green infrastructure and education. Nature is not just protected – it becomes a co-creator in urban and social life. Some of these insights could also be read as cultural (e.g., value shifts, eco-rituals) or social (e.g., collective action, urban community engagement).

Table 14. *PESTEC Edvin – Environmental Dimension.*

Circle	Group	EDVIN – ENVIRONMENTAL
C1	G1	Major narrative shifts: no tipping point.
C1	G1	Human populations have learnt how to organize societies based on the concept of Good Life (buen vivir) and do not over-use resources; only the necessary. We have understood the limits of Earth and people value the environment.
C1	G1	Young People are engaged with climate action
C1	G1	Meaning of (…) planet
C1	G1	Satisfaction from concrete and tangible project outputs (E.g. nature restoration)
C2	G1	Respect Nature!
C1	G5	Promoting ideas about how does a healthy environment look, feel, smell, etc. → make the idea FEEL, not just blank words
C2	G5	Construct new infrastructure in cooperation with nature à Green urbanization looks good and brings nature to the urban kids
C2	G5	Experimentation and iteration

Culturally, Edvin's world promotes (Table 15) lifelong learning and value-based living; making eco-living appealing and "cool", especially for youth; holistic wellbeing education (e.g. food schools, nature schools, ethics coaching); AI as a tool for tailoring sustainability messages to different values and worldviews. This reflects a strong identity shift: culture becomes an active agent of change, not just a reflection of it, with a focus on creating a quiet, focused culture that values slow work and long-term thinking. Emotional intelligence, ethics, and meaningful living are foregrounded. These themes often blend with social and technological dimensions – especially where learning, empathy, and media are involved.

Table 15. *PESTEC Edvin – Cultural Dimension,*

Circle	Group	EDVIN – CULTURAL
C2	G1	Personal experience accumulated
C1	G1	Emotional Individual Appeal
C2	G1	Provide opportunity for life time learning.
C2	G1	AI is used to tailor communication related to sustainability to diverse groups. Aligning with values.
C2	G1	I would not change in the narrative: Quiet and focused culture, Appreciation for slow work, Long term thinking
C1	G5	Make eco-living cool for young people
C2	G5	Well-being – teaching
C1	G5	Boldly embracing the values. Make it "cool"
C2	G5	Wellbeing, values and ethics coaching that is more holistic and explaining "bold" means of coexisting and thinking
C2	G5	Wellbeing courses
C2	G5	Food School, nature school

Irene the Influencer

Irene's political landscape (Table 16) centers on governance and institutional roles in care and mobility. There is a demand for better healthcare for the elderly that reduces the caregiving burden on families, alongside calls for lighter, more flexible governance regulations but control from institutions. Climate change and extreme weather impose new travel restrictions, highlighting tensions between free mobility and regulatory limits tied to nationality and environmental concerns. These factors shape Irene's experience of control and freedom within political frameworks. Some themes here, such as mobility restrictions due to climate policies, naturally overlap with environmental concerns.

Table 16. *PESTEC Irene – Political Dimension.*

Circle	Group	IRENE – POLITICAL
C1	G2	Better Healthcare for the elderly so that not everyone has to be involved
C1	G6	Lack of control – control comes from institutions
E	G6	Lighter governance regulation
C2	G6	Care houses where needed
C1	G7	Due to extreme weather and worsening climate change, it became regulated how and where one can travel by flight, hence she would been limited in her movement anyway.
C1	G7	Free mobility – visa relaxations
C1	G7	Consider nationality & travel immobility → Most human beings cannot go wherever they want

Economic themes revolve around redefining work, time, and value (Table 17). There is an interest in setting earning limits to allow for early retirement and life focus, questioning what constitutes "work" especially in relation to unpaid and care activities. Time emerges as a currency, with ideas like "time banks" and exchanging services, particularly in caregiving contexts. Monetising health conditions and experiences is noted, but raises concerns around privacy and wellbeing, reflecting broader challenges in balancing economic incentives with personal costs. Elements concerning caregiving and unpaid work can intersect with social and cultural dimensions, given their relational and identity aspects.

Table 17. *PESTEC Irene – Economic Dimension*

Circle	Group	IRENE – ECONOMIC
C2	G2	Set a target limit for earnings after which to "retire" from work to focus on life
C2	G2	Activities that can be monetized?
External	G2	Is unpaid work, work?
C1	G6	Benefitting from burnout. Monetising our health conditions
C1	G6	Experiences as marketable products → value, but you have to sacrifice your privacy
C1	G6	Time as a currency paid and pay with time
C2	G6	Time currency for CARE
C2	G6	Banks of time to exchange services

The social dimension emphasises clear boundaries between work and leisure, mental health support, and community care (Table 18). Ideas include healthcare accessible even in leisure spaces, such as beaches, and collective planning of care work to ensure adequate free time for all. There is a reorientation toward more formal work divisions but also a questioning of traditional schedules, with suggestions for flexible workweeks tuned to mental health. Caretaking communities are viewed as culturally valuable and relaxing, with AI or robotic assistance playing a role in supporting care and social connection, especially among seniors. Given the focus on wellbeing and community, many points here overlap with technological and cultural domains, and not only.

Table 18. *PESTEC Irene – Social Dimension.*

Circle	Group	IRENE – SOCIAL
C1	G2	Clear boundaries between work and leisure time
C1	G2	Therapy for mental health
C2	G2	Health care on the beach
C2	G2	Medicine?
C1	G6	Take care about neighbors, each other
E	G6	Values and system a problem → Freedom
C1	G7	Why work 5 days a week? Why not 2 or 7?
C1	G7	Return to a more formal working life, division of labour
C1	G7	Much less freedom of choice.
C1	G7	Reorientation in order to separate work from leisure.
C2	G7	Collective reflection and plan for how to organize care work, considering the need for 8 hours of free time for all/day
C2	G7	Work schedule based on mental health
C2	G7	Caretaking community is as cool and relaxing as surfing /being part of a surfing community.
C2	G7	AI/family/[someone, a robot?] Is taking care of Irene
C2	G7	Surf camps for seniors she cares for in Costa Rica.

Technology is portrayed as a facilitator and enhancer of care, communication, and time management (Table 19). AI is employed to create space for volunteer work and prioritise tasks to avoid burnout. Hybrid human-robot organisational structures support temporary care for elderly and disabled individuals. Technology helps optimise work-life balance and extends experiences, such as virtual reality surfing or “armchair travel.” There are reflections on replacing personal presence with avatars to save time, and AI tools assist in content creation, illustrating a blend of efficiency and personal expression. The emotional and social roles of AI underline significant intersections with social and cultural factors.

Table 19. *PESTEC Irene – Technological Dimension.*

Circle	Group	IRENE – TECHNOLOGICAL
C1	G2	Employ AI to make room for more volunteer work
C1	G6	AI could help prioritize tasks to prevent "meltdowns"
C2	G6	Design to support system
C2	G6	Organizational structure combining human & robots to provide temporary care

C2	G6	How do we deploy robots & tech to support care of elderly and disabled?
C1	G7	Help to manage her work time and to preserve personal time/life.
C1	G7	AI increases freedom by optimizing the use of time in Irene's work tasks
C2	G7	Replace her character as a product by an avatar, a virtual persona
C2	G7	AI creates the same posts based on her existing feed so she needs only modify them, which saves time from influencing.
C2	G7	A VR appliance would help her to experience surfing from her living room after work in Finland.
C2	G7	"Total recall" travelling agencies for armchair travel.

Environmental considerations highlight local sustainability and reduced dependence on international travel (Table 20). Walkable neighborhoods with essential services, energy-efficient data centers, and sustainable transport modes support Irene's lifestyle. The environmental benefits of slowing down and staying local – especially in caregiving roles – are linked to wellbeing and burnout recovery. Innovations in energy production also emerge as a theme, reflecting a holistic approach to environmental impact. Environmental issues here intersect with political mobility regulations and social wellbeing themes.

Table 20. *PESTEC Irene – Environmental Dimension.*

Circle	Group	IRENE – ENVIRONMENTAL
C1	G2	Good near environment: walking and cycling conditions, services like school, shops
C1	G6	Less dependence on international travel
C2	G6	Source of energy
C1	G7	More sustainable modes of transport
C1	G7	More energy-efficient data centres (AI etc. uses too much)
C2	G7	Working as a local caretaker in Finland creates less environmental harm compared to traveling and flying a lot. Staying and slowing down might help healing burnout.
C2	G7	New energy production means.

Culturally, Irene navigates changing narratives around work, freedom, and identity (Table 21). She challenges conventional definitions of work and leisure, exploring personal purpose beyond societal expectations. There is a move toward voluntary work and creating authentic, realistic content that moves away from influencer stereotypes. Independence from the attention economy and valuing quality of influence over quantity are key themes. A supportive cultural structure around caregiving and identity as a caregiver influencer reflect evolving social roles and values. Cultural shifts here are deeply linked with social behaviors and technological mediation of identity and communication.

Table 21. *PESTEC Irene – Cultural Dimension.*

Circle	Group	IRENE – CULTURAL
C1	G2	Changing the narrative of life in social media
C2	G2	Partial Rebranding towards voluntary work for synergy
C2	G2	She could create more “realistic” content, so she doesn’t need to be an actress
E	G2	What is work?
E	G2	What is freedom?
E	G2	Leisure vs. work?
E	G2	Personal purpose, gives value?
E	G2	Preferable to whom? Irene?
E	G2	What happens to the influencers of today?
E	G2	Appear preferable or make preferabile? Preferable to whom?
E	G2	What is the completion of work? When is work completed?
E	G2	There is a struggle in the definition of work
E	G2	Duality of lives
E	G2	Is Irene elite?
C1	G5	Being easy to be fool or free from stereotyped thinking by talking with partner AI
C1	G6	A greater sense of supportive cultural structure
C2	G6	Care giver influencer as identity
C2	G6	Independence from attention economy
C1	G7	Irene’s wellbeing is increased when she focuses the quality of influenced ppl (people) instead of quantity of like, followers

Doris the Dream Designer

In this analysis for Doris, the political and economic dimensions are not represented in the available data. The focus is therefore on Social, Technological, Environmental, and Cultural aspects, which reveal key themes about resilience, collaboration, and ecological care.

Doris's social dimension focuses strongly on collective resilience and peer support communities (Table 22). There is an emphasis on coordinated group action in the face of crises, rejecting disengagement or passive responses like "quiet quitting." Integrating nature at multiple levels and building diverse teams to develop resilient strategies for health and other intertwined crises are key themes. Spirituality and telepathy emerge as novel forms of distant communication and shared resilience, highlighting a blend of traditional and futuristic social ties. These social dynamics naturally intersect with cultural values around care and community, as well as technological tools that enable new forms of connection.

Table 22. *PESTEC Doris – Social Dimension.*

Circle	Group	DORIS – SOCIAL
C1	G3	Coordination of peer support communities
C2	G3	Collective presence in the face of crises à no time for detachment, quiet quitting etc.
C2	G3	Incorporate nature in multiple levels
C2	G3	Building a team of people having different backgrounds to suggest resilient strategies for people dealing with the health crises (probably triggering other crises)
C2	G3	Spirituality and telepathy for distant communication sharing and resilience

Technology in Doris's context is a facilitator of problem-solving and expert collaboration during crises (Table 23). AI is envisioned as a connector of specialists into agile "task teams" and as a helper in automating basic tasks, freeing people to co-create innovative solutions. Additionally, there are creative uses of technology such as modifying dream therapy into an information-sharing method, reflecting an integration of emerging tech with human cognition and wellbeing. The social use of AI to coordinate and support collaboration illustrates overlaps with social structures and cultural modes of knowledge sharing.

Table 23. *PESTEC Doris – Technological Dimension.*

Circle	Group	DORIS – TECHNOLOGICAL
C1	G3	Modify dream therapy into an information sharing method (right after dream therapy is invented)
C1	G3	AI connect experts to form a "task team" to address the crisis
C2	G3	AI will help to solve problems
C2	G3	AI for basic tasks. People to co-create innovative solutions

Environmental concerns in Doris's narrative revolve around active care and stewardship of the planet (Table 24). This includes growing and protecting flora and fauna, sharing findings widely through collective knowledge repositories, and developing laboratory-produced water as a sustainable resource. Disaster preparedness, anticipation, and recovery receive strong attention, with calls for global funding and the import of best practices from regions less affected by crises. This proactive and systemic approach reflects a deep ecological awareness. These themes link closely to social collaboration for resilience and to political or economic mechanisms supporting environmental readiness.

Table 24. *PESTEC Doris – Environmental Dimension.*

Circle	Group	DORIS – ENVIRONMENTAL
C1	G3	Grow/face care/planet/disseminate some flora/and fauna species. They also need to lop their findings and share with all/a way of joint white book.
C2	G3	Laboratory-produced water
C1	G3	Cancel natural disaster! Better anticipation, preparedness, be aware of its vulnerabilities
C1/ C2	G3	Global funding for natural disasters, weather, solar storms, etc. And readiness to recover from them.
C2	G3	Importing ideas and best-practices from "happy" areas of the world

Culturally, Doris emphasizes learning, shared purpose, and care as a life mission (Table 25). Employees use work time to acquire new skills related to nature and wellbeing, fostering knowledge exchange and dialogue. Recognising individual values and skills is seen as foundational to finding meaningful roles that contribute to global healing. Drawing on crisis knowledge from experienced communities supports survival strategies and collective education. Cultural dimensions are deeply intertwined with social cohesion and the use of technology to enable continuous learning and community-building.

Table 25. *PESTEC Doris – Cultural Dimension.*

Circle	Group	DORIS – CULTURAL
C1	G3	During these in-house-work hours employees need to learn something new, such as detecting new plant and/or fruit/mushroom and share with other colleagues in order to discuss how these species can be used for human/animal wellbeing.
C1	G3	Recognizing her values and skills would be the first step to find something new and meaningful to do and help the world
C1	G3	Care as a personal mission, a purpose of life that can be cultivated in the new situation
C2	G3	Leaning on knowledge from communities who went through crises to draw the relevant knowledge out different strategies, then put in place to survive / maintain some functioning
C2	G3	Educate other people – TEAMWORK

Ranjit the Quantum Revolutionist

In Ranjit's case, the Political, Economic, and Environmental dimensions are notably absent from the current dataset. This absence suggests a focus primarily on internal, relational, and technological transformations rather than broader systemic structures such as governance, financial models, or ecological concerns. However, some of the existing items could imply or touch on these omitted dimensions if further developed.

Ranjit's social dimension centers on work-life balance, family connections, cultural integration, and the psychological impact of technological overexposure (Table 26). Key themes include proposals like the 4-day work week, time for yoga and family, and a full break from technology to reconnect with human values and creativity. There's also a cultural inclusion note – ARTO advocating for the acceptance of Indian-grown individuals in institutional contexts. These elements could overlap with political (institutional equity) or cultural (identity and belonging) dimensions.

Table 26. *PESTEC Ranjit – Social Dimension.*

Circle	Group	RANJIT – SOCIAL
C1	G4	Adaptation, Goals, Integration, Latency of problems
C1	G4	Wife + kids missing in the story
C1	G4	4 days work week
C2	G4	360 break from all technology – back to human connections. + freetime for ideation of developing his line of work.
C2	G4	Ranjit gets better treatment if ARTO convinces the institutions where Ranjit work for acceptance Indian grown people.
C2	G4	Raising interest in AI
C2	G4	At least 1 day a week at home with loved ones. Regularly only with close family. Starting a day with yoga.
E	G4	Time with family can help to see the life after ARTO

Technology is deeply entwined with Ranjit's life, especially through the presence of "ARTO" (Table 27). This dimension explores boundaries between human agency and AI control, highlighting motivations for more human-aligned technology. Items include time limits on AI use, planning assistance, a roadmap for improved versions, and using the metaverse to organise time. There's also a shift toward physical presence – less autonomy for the AI and more embodiment of Ranjit himself. This dimension overlaps with social aspects when technology supports wellbeing, and with cultural themes where AI control intersects with identity and autonomy.

There is an interesting counter-trend present in this kind of notions. Instead of embracing the technology at its fullest, personal well-being demands breaks from digital environments and analogue solutions. David Sax has argued for analogue future for example (Sax 2022). On the other hand, in T-winning Spaces 2035 project's earlier workshop one of the topics was return back to basics where people would focus more on nature and simple life rather than embracing the latest technology (see Heinonen, Ebrahimabadi et al. 2024). Furthermore, the dependence on technology can even be seen part of societal resilience, since crisis situations may lead to a situation where there are blackouts, which make power depended technologies useless (Heinonen, Viitamäki et al. 2023).

Table 27. *PESTEC Ranjit – Technological Dimension.*

Circle	Group	RANJIT – TECHNOLOGICAL
C1	G4	AI as polite motivator
C1	G4	Metaverse organising time
C1	G4	Time limits for the ARTO use for Ranjit
C1	G4	More physical exercise. Ranjit more in the same place
C2	G4	Technology roadmap of “ARTO”.
C2	G4	Through analysis: What/why went wrong; Which tasks new AI could take care of. → Development of a better version of ARTO.
C2	G4	ARTO? Humanoid? Look & Image
C2	G4	Helping to plan work more suitable for him
C2	G4	New version of ARTO that has less autonomy à Family assistant

Ranjit’s cultural dimension is minimal but pointed (Table 28). It includes references to religion, systemic belief structures, and a key question: “Does the death of AI make Ranjit lose control?” – which touches on themes of dependency, identity, and existential meaning in a techno-centric world. Cultural reflections here also engage with technological and social concerns, especially around autonomy, control, and belief in human versus artificial systems.

Table 28. *PESTEC Ranjit – Cultural Dimension.*

Circle	Group	RANJIT – CULTURAL
C1	G4	Does the death of AI make Ranjit lose control
C1	G4	Religion & System

5. REFLECTIONS AND CONCLUSIONS

This report is a comprehensive document of a foresight exercise conducted within the Millennium Project Session at FFRC Futures of Technologies conference with the purpose of providing novel insights for the T-winning Spaces 2035 Project. The applied futures mapping activity follows the broader Futures Clinique methodology aimed at provoking creative, participatory futures thinking by encouraging participants to co-create alternative, transformative pathways beyond the boundaries of present assumptions. The participants were asked to interrogate the four narratives generated within the project through multiple lenses, including the dynamics of freedom and control at individual and community levels and the intersections of ecological, social and political crises with professional and personal identities.

These narratives carry a psychological aspect that relates us to the future in a way different from how futures are usually discussed.

Glenn, in his keynote to this MP Session, pointed out that narratives carry a psychological aspect that relates us to the future in a way that is different from how futures are usually discussed. We consider this as a pivotal observation. The hybrid method of combining the Futures Wheel with Narratives worked well from this perspective. This is because it made participants see future aspects of the world through the lenses of individuals and also the problems and possible solutions in novel light, starting from the individual. However, this did not pose the barrier of society vs. individual, since the participants saw both society and individuals in it through different lenses once narratives were used.[24]

The participants were also requested to assess and adapt the envisioned future work environments with a triple focus on enhancing wellbeing, environmental sustainability, and the integration of AI and digitalisation. The revision was not only textual but also conceptual: participants evaluated the plausibility, emotional resonance, and systemic relevance of each persona, often reframing aspects of their environment, motivations, or social entanglements. In this way, the narratives served both as analytical devices and creative springboards for collective future thinking. The whole event and the process used represents a specimen of collective intelligence.

This exercise demonstrates how the Futures Wheel workshop methodology can effectively combine different insights to explore collective imaginaries about the futures of hybrid work, particularly through the lenses of Wellbeing, Environment, and Artificial Intelligence. The quantitative data[25] revealed a rich and balanced engagement across thematic areas and between narrative critique and practical realisation. The elaboration phase highlighted participants' dual interest in envisioning desirable futures and identifying concrete pathways to achieve them. Notably, the prominence of AI-related contributions in the realisation phase suggests a widespread belief in technology's role as a facilitator of future work transformations, while Wellness and Wellbeing[26] remains a consistent and cross-cutting concern throughout all stages.

[24] See also Fergnani (2019) on how scenario-specific fictional individuals can enrich futures work by increasing empathy, liveliness, and engagement. This applies to scenario-like narratives as well, as in our case.

[25] I.e., the number of post-its and their placement by each group; see Ch. 4 and Appendix 3.

[26] This aligns with the findings presented in our earlier report. In the report, expert interviewee argues that offices have become cozier and more home-like (Heinonen & Viitamäki 2025). This kind of development can be seen as a way to enhance employee well-being.

A particularly significant insight to be further reflected in the analysis, emphasised by Jerome Glenn in the workshop closing, is that the idea of inventing[27] ourselves is more a feature of our future than our past. Traditionally, individuals were expected to 'fit in': the school system taught conformity, jobs demanded compliance, and retirement systems prepared us for a defined life cycle. Today, however, we face the challenge and opportunity of continuous self-invention. This shift towards self-actualization opens new paths for personal meaning and growth, but as the narratives and the groups pointed out, it also brings risks such as stress, alienation, or burnout if not supported thoughtfully[28]. This creates a crucial challenge for educational systems at all levels – elementary, secondary, and tertiary – to help individuals invent themselves without succumbing to these negative consequences.

The idea of inventing ourselves is more a feature of our future than our past.

The rich and diverse outcomes from the group analyses illustrate the multifaceted and often contradictory nature of work futures as portrayed in the narratives. Across the different characters, we see tensions between freedom and control, individual well-being and societal demands, technology's promise and its risks, as well as environmental constraints and global crises. Importantly, the discussions highlighted the central role of personal values, community trust, and the need for multidimensional resilience – not just infrastructural but social and psychological – as we navigate increasingly complex futures.[29]

Personal values, community trust, and the need for multidimensional resilience play a central role as we navigate increasingly complex futures.

The small group work during the Millennium Project Special Session produced lively discussions and a wealth of insights, but it also highlighted several areas where the workshop design and facilitation could be improved[30]. A major factor influencing the dynamic of working is the number of participants. Here, we faced a positive problem of the unexpectedly large number of participants – 80 instead of the planned 30. Many of these were organisers, and we had the total of 58 identified/registered participant[31]. On one hand, this led to quite crowded tables, stretching the intended group sizes and posing hazards to group cohesion and equal participation. On the other hand, this generated an abundance of data and rich conversations.

Thematic balance varied across groups. For example, Group 6 focused strongly on wellbeing, with AI being subsumed under that category, while the environmental perspective was underexplored. Other groups,

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[27] Inventing ourselves and our futures is also central part of Inayatullah's concept of opposing to used futures where one's image of future is borrowed from somewhere rather than born from within (Inayatullah 2008). Weigel (2018) claims that we should re-invent the whole human race. She sees the most impressive innovations of the 21st century to be those revising the concept of work. She defines us humans as 'machines of emotion, not of work'.

[28] Khallash & Kruse (2012) have pointed out that too goal-oriented leisure time can lead to burnout for example. This notion resonates well with the idea that the realisation of self-actualisation economy needs careful support.

[29] See Kingma (2019) on the contradictions of new ways of working (NWW), such as freedom versus control, the double-edged nature of technology, and the importance of trust and social cohesion in futures of work.

[30] Parts of the comments are based on the moderators' reports, intended for internal use within the project. Thus, the process and approaches in the foresight exercises can further be developed.

[31] Since there was no pre-registration in the conference to the sessions, the number of session participants had to be anticipated. For the purpose we had moderators in the first stage, as well as moderators that were ready to take the task if needed. They had the instructions and were prepared to step in. Otherwise we would have had to limit the number of small groups considerably.

like Group 4, took the narrative in directions more centered on systemic issues such as economic values and burnout, rather than just AI functions. This variance suggests that while the narratives enabled deep exploration, the framework might benefit from a more even scaffolding of the three lenses – wellbeing, environment, and AI – to ensure each receives attention. It has been noted that the use of narratives in foresight can aid transition processes surrounding missions.[32]

The Futures Wheel method was generally successful in structuring the futures dialogue. Most groups moved naturally through the two circles – vision and realisation – even if in a non-linear way, often jumping between levels or working ideas across domains. This was indicated to be allowed already in the instructions for small group working. The reason behind this flexibility is to allow a free flow of ideas, not losing any 'diamonds'.[33] Some participants ideated directly onto the second circle after proposing a first-circle idea, showing the functioning of the intuitive use of the method.

The objective of the workshop was to generate ideas that make the narratives more desirable by eliciting themes and related implementation strategies. Now that this analysis has provided a first mapping of participant contributions – highlighting core themes, tensions, and potential solutions – the next steps may focus on consolidating and deepening these insights to advance the project's goals:

- **Refine and prioritise themes and solutions:** based on the interpretation of the data received, to identify the most salient and promising ideas within each thematic area and across the concentric circles. Prioritise these ideas for further development, considering their feasibility, impact, and alignment with the overarching vision of hybrid work futures.
- **Develop integrated narratives:** use the enriched and refined ideas to revise the original tentative narratives, enhancing their relevance and desirability. This could involve creating more detailed or pluralistic stories that reflect the multi-dimensional insights gathered, incorporating tensions and diverse stakeholder perspectives.
- **Translate ideas into strategic recommendations and present tentative timelines for their execution:** building on the solutions emerging from Circle 2, formulate actionable strategies or policy recommendations that support the realisation of desirable futures. These may address systemic factors highlighted through the PESTEC analysis, ensuring a holistic approach.
- **Prepare for communicating the revised narratives for various stakeholders and for using more visualisation in conveying the narratives.**

To conclude, this report acts as a document presenting in detail a foresight exercise on radical futures of hybrid work narratives – its starting points, process and methods used, as well as results gained. Furthermore, it features both as a milestone and a solid bridge for the next and final step in the T-winning spaces project for our work package. This final phase focuses on elaborating the four radical narratives and presenting them to various stakeholders in intriguing and plausible ways to probe possible trajectories and to propel foresight into action. Exploring the research topic – in this case hybrid work futures – in the nexus of participatory and creative foresight (Futures Clinique), using radical approach (futures provocation and paradox probing), as well as addressing and interpreting data in the form of narratives (proactive narratives) is a gateway to transformative futures.[34]

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[32] See Rosa et al. 2021.

[33] A challenge in interpreting the ideas generated on post-its is evident if the idea is not described in full or it is written in an ambiguous way. Here, the procedure of moderators recording the discussion has proven valuable. Another challenge arises with the post-it notes that were not well positioned within the Futures Wheel circles. This made it difficult to clearly determine which area – wellbeing, environment, or AI – they belonged to in some cases, both based on their placement and content.

[34] See e.g. Rosa et al. (2021) who emphasise the importance of narratives in a participatory foresight process.

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APPENDIX 1. Methodological Note for the Four Narratives

The Radical and the Resilient: Four Narratives of Futures of Hybrid work 2035

Below are the four radical narratives as constructed within the T-winning Spaces 2035 project. Narratives are powerful tools for communication, inspiration, sense-making and even manipulation. Narrative process = actors' portraits + storyline texts to influence policy debates.[35]

Narratives make sense of the futures of work opening up different vistas for actors set in different spatial and temporal conditions and contexts. The narratives are used as strategic tools for sense-making of complexity and to contribute to anticipatory governance in companies and organisations. Within the fast-changing societal panorama (VUCA world and socio-technical transformation) there is a growing need for science communication to tackle complexities.

Our use of narratives = use of collective intelligence. Collective intelligence is as an emergent property from the synergies among: data-information-knowledge; software-hardware; and individuals (those with new insights as well as recognized authorities) that continually learns from feedback to produce just-in-time knowledge for better decisions than these three elements acting alone. (Definition by Glenn, Jerome C. Collective Intelligence – One of the Next Big Things, Futura 4/2009).

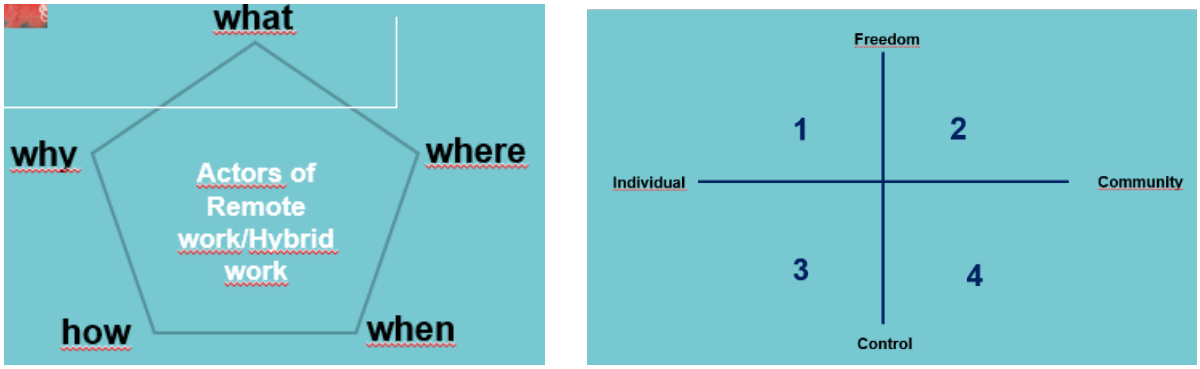

Figure 29. *The four narratives are differentiated along the two axes forming quarters: one axis is freedom/control, the other axis is individual/community. In each actor-based narrative the framework of* ***what – where – when – how – why?*** *is presented.*

We proposed the narratives to be evaluated concerning especially the three topics of wellbeing, environment and digitalisation/AI. The narratives are to be elaborated towards desirable futures.

Each narrative is contextualised in a new paradigm for hybrid work 2035. This paradigm as presented in Ch. 3.1 is a description (not a prediction/forecast/vision) of the status and characteristic of worklife, generated within the T-winning Spaces 2035 Project, based on the findings from a two-round Delphi study and interviews, focusing on hybrid work.

The paradigm was not addressed in the MP Session other than in the introduction, but it was reflected in the Futures Window depicting visual weak signals for the new paradigm of hybrid work. In the MP Session the main aim was to **elaborate the narratives in small groups.**

[35] See e.g. Jarva, V. (2014). Introduction to Narrative for Futures Studies. Journal of Futures Studies, March 2014, 18(3): 5–26. Milojevic, I. & Inayatullah, S. (2015). Narrative foresight. Futures Volume 73, October 2015, Pages 151–162

APPENDIX 2. Narratives in a Nutshell

Narrative 1: EDVIN THE ECONAUT (Individual + Freedom)

Who: Male 69 yrs, no higher education, DIY guru, widower, 3 adult children, lonely wolf

What: Eco-restorer, once retired, newly employed by several org (public/private purifies sea water in the Baltic Sea, plants mangroves in the Caribbean, grows food from cells

Where: Extreme multilocality. Lives in Turku in a small apartment, can use an office in Turku Science Park, travels on-demand globally (multimodality: train, planes, ships)

When: Hoffice 2 days, client or target places 2 days, 1 day at office as attractor/week

How: Mobile mini-lab, under water conditions, extreme weather conditions, prepares for adventures, survivalism and all-round mobility, AGI for innovative solutions

Why: Driven to combat loss of biodiversity (because he can – he's a sought-after global contributor) + maintain own health

Photomontage by Amos Taylor. Photos by gaspar zaldo, Milad Fakurian on Unsplash.

Narrative 2: IRENE THE INFLUENCER (Freedom + Community)

Who: Female 25 yrs, graduated fast from business school (economics, international marketing), raised on 'rich milk' of digital fluency, diversity and individualism, has a partner, one child and pets

What: Freelancer in brand building + grass-root activism for animals both in Finland and abroad

Where: Extreme bilocality. She lives in Helsinki (in a big rented collective with a designer partner and like-minded friends) and Portugal/CostaRica + virtual presence in Kenya&Uganda (for animal protection). Frequent flights (locally public transit or bikes)

When: No office, hoffice 2 days, third places 3 days, half a year in Finland/half abroad

How: Advanced mobile work equipment incl RT vlog camera, AI in multiple use, android service robot

Why: Wants to combine work and life – satisfaction from growing followers in social media, seeking for sustainable ict solutions, priority to belong to a surfer community

Photomontage by Amos Taylor. Photos by Sirkka Heinonen, Thevayden, ray rui on Unsplash.

Narrative 3: DORIS THE DREAM DESIGNER (Individual + Control)

Who: Female 41 yrs, doctoral degree, married to a professor from Wuhan University, China

What: Medicine practice + clinical breakthrough research on epidemiology and dream studies, dreams as therapy for mental health, vocational health, gene therapy and synthetic biology

Where: Lives in Kuopio in Archipelago city quarter in a spacious countryhouse, travels quarterly to China and Africa for a month, seeks for inspiration in forests and parks where she has installed huts and spots for both physical exercise and mental digi-freedom for all to use, ”beds at offices”

When: Hospital 2 days, home private practice 2 days, 1 day voluntary work /week

How: Lab work with extreme precautions (bird flu, Ebola), quantum computer access, strict privacy precautions

Why: Care as personal mission, ethical concerns for global population problems, and for future generations, aspires for a Nobel prize

Photomontage by Amos Taylor. Photos by Michael Sum, Edib Bildiren on Unsplash , and Dall-E3.

Narrative 4: RANJIT THE QUANTUM REVOLUTIONIST (Community + Control)

Who: Male 33 yrs, Indian immigrant, Sikhi, doctoral degree in AI engineering, married to a Finnish art event organiser and yoga teacher, with twins adopted from Kerala

What: After arrival to Finland, used to work in the Finnish Bluefors Co producing cooling systems for quantum computers and now has a private successful quantum computing start-up and teaches in Oulu university

Where: Lives in Oulu in a spacious skyscraper, often accommodating his fellow Indians + owing to Helsinki University co-operation has ample and luxurious working space in co-working spaces in Helsinki centre, flies regularly Oulu-Helsinki route

When: Oulu start-ups joint office 2 days, Helsinki 2 days, third places in Finland or abroad 1 day/week

How: High-tech work equipment, AGI + quantum computers, classified work for government, stress from responsibilities to many levels: large family in India, reports to Finnish Secret Police, expert on counterterrorism and detecting/preventing cyber attacks

Why: Found a haven in Finland, but mental problems due to high digistress and workaholics, cannot return to India for political reasons but sustains the Indian family clan, wants to help those in distress, intercultural approach

Photomontage by Amos Taylor photos by Dollar Gill, Daniel Hatcher, Jason Leung on Unsplash.

APPENDIX 3. Number of Participants and Post-Its per Group and Theme

Table 29. *Summary of the number of participants per group.*

Group number	Narrative	Number of Participants
Group 1	Edvin the Econaut	9
Group 2	Irene the Influencer	8
Group 3	Doris the Dream Designer	8
Group 4	Ranjit the Quantum Revolutionist	8
Group 5	Edvin the Econaut	8
Group 6	Irene the Influencer	10
Group 7	Irene the Influencer	7
	Total	**58**

Table 30. *The overall entries in terms of post-its reported.*

Group/Story		Thematic Area			
	Circle	**Wellbeing**	**Environment**	**AI**	**Total**
Group 1	C1	4	5	2	11
Edvin	C2	5	4	5	14
	Ex	1	0	1	2
Group 2	C1	4	1	1	6
Irene	C2	5	2	0	7
	Ex	0	6	5	11
Group 3	C1	4	3	2	9
Doris	C2	3	0	4	7
	Ex	0	3	0	3
Group 4	C1	3	4	2	9
Ranjit	C2	5	1	4	10
	Ex	1	0	0	1
Group 5	C1	2	3	2	7
Edvin	C2	1	3	2	6
	Ex	0	1	1	2
Group 6	C1	4	3	1	8
Irene	C2	3	3	3	9
	Ex	1	1	0	2
Group 7	C1	5	2	3	10
Irene	C2	4	5	4	13
	Ex	0	0	0	0
	Total C1	26	21	13	60
	Total C2	26	18	22	66
	Total E	3	11	7	21
	Total	55	50	42	147

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Report of the Millennium Project Session at the Futures of Technologies Conference 2025

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Finland Futures Research Centre • University of Turku
ISBN 978-952-249-628-7 (pdf) • ISBN 978-952-249-629-4 (print)
ISSN 1797-1322

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