



FROM SIGNALS TO FUTURE STORIES

A HANDBOOK FOR APPLYING
FORESIGHT IN THE FIELD OF WELFARE

Harri Jalonen, Mira Lehti, Anna Tonteri, Minna Koskelo, Anu K. Nousiainen, Tuula Jäppinen

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IN THE FIELD OF WELFARE



HORIZON 2020



innosi

Innovative Social Investment
Strengthening communities in Europe

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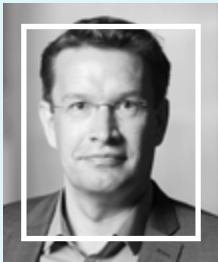
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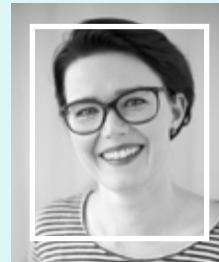
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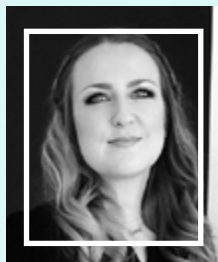
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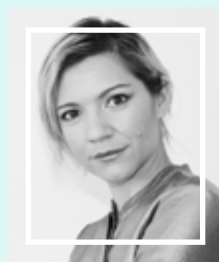
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Regional Authorities

VIDEOS

Foresight Process

Societal Challenges in Europe

Human Centric Participatory Foresight

Monitoring Future Signals

Trendcards as Tools

Designing Desired Future

Please note that all interactive parts (video buttons) of this document might not function properly. You can find all InnoSI Project videos <http://bit.ly/2Ac0Vra>

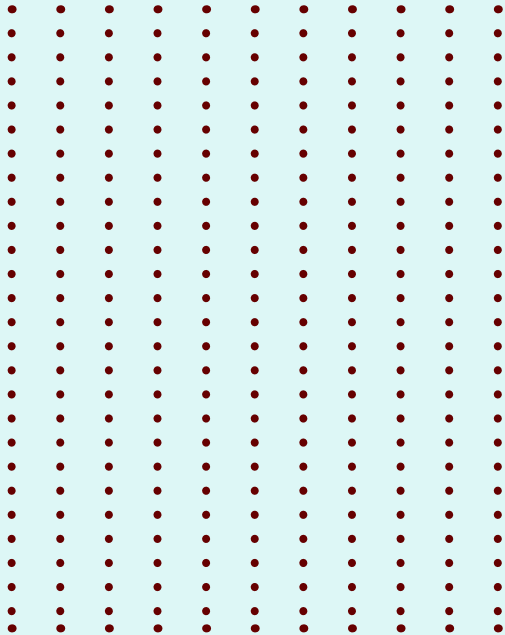


TABLE OF CONTENTS

Foreword	6
Introduction	8
Harri Jalonen, Mira Lehti, Anna Tonteri, Tuula Jäppinen	
The future is not free of the past	11
Harri Jalonen, Mira Lehti, Anna Tonteri, Tuula Jäppinen	
The future is unknown	14
Harri Jalonen, Mira Lehti, Anna Tonteri, Tuula Jäppinen	
The foresight flow	23
Minna Koskelo & Anu K. Nousiainen	
Key takeaways	35
All authors	
Trends and Driving forces	37
All authors	
Future stories	47
All authors	



FOREWORD

FOREWORD

Welcome to a handbook for applying foresight in welfare. With foresight we refer to an on-going series of acts that enable to spot patterns before they fully emerge, to identify current phenomena that are likely to influence the direction of future events, and to organise resources to engage with the future.

We believe that foresight is not a mysterious gift bestowed at birth but an ability that can be cultivated. We hope that this handbook provides you insights and practices that you can use today in order to influence on the future. We capture our key ideas into the concept of foresightfulness – a mindset for addressing the unknown future.

We split foresightfulness into three phases which are sensing, sensemaking and seizing (Koskelo & Nousiainen).

We acknowledge the great work done around foresight. Believing on the idea that foresight cannot be executed independently from its context, we have not written this handbook to give exhaustive or even sufficient coverage of foresight techniques. Instead we deploy foresight in a context of social investment.

We do not provide forecasts of social investments. The aim of the handbook is to improve foresightfulness that can be used for exploring the future and supporting the strategic decision-making process. The handbook is not written to explore what may happen, but how the future can be perceived as alternative futures.





INTRODUCTION

INTRODUCTION

This handbook was developed as a part of the European InnoSI research project (2015–2017) funded by the European Commission’s Horizon 2020 programme. The InnoSI project was launched to design robust social investment strategies which can deal with emerging socio-economic challenges. The handbook is grounded in the idea that good foresight always requires knowledge of the bigger context (i.e. historical events, industry actions and societal movements) which has influenced on societies as they have evolved over time.

With social investment, we refer to investments to improve the prospects for future economic and social participation. The emphasis is on investments in people to enhance their productive capacities and foster longer-term economic development. Social investment stresses the life course dimension of social policies and their long-term benefits for society. Social investing has been shaped as a response to the current socio-economic and environmental challenges including the demographic crisis and ageing, economic downturn, increasing social exclusion and poverty.

During the InnoSI project, it has become explicit that the forms and phase of development of social investing varies between countries and regions. Due to historical, political, economical and cultural reasons, social investments are typically country- or region-specific solutions to more or less global challenges.

Acknowledging the differences between European countries and regions, the handbook deploys a phenomenon-based approach. It means that we do not foresight social investing opportunities from the perspective of any particular actor. Instead we aim to provide thinking tools for mapping and understanding the big picture around social investing.

While we do not set any strict time frame for foresight, we suggest that the ideas and suggestions presented in this

“With social investment, we refer to investments to improve the prospects for future economic and social participation.”

handbook are more suitable for thinking what may happen in the next decade than in the next quarter.

Social investing is future-oriented activity. Money and other resources are invested in a particular policy area for the purpose of gaining returns in the future. However, in contrast to investments in machinery, the return on social investments is difficult to calculate exactly. Returns depend on positive and negative spill overs and the success of collaboration between the private, public and third sectors.

In our view, social investing represents a new welfare society paradigm creating confusion and new puzzles. What will come with the paradigm shift cannot be known, only discovered through careful exploration and observation. Therefore, the handbook addresses three important topics:

- What kind of knowledge challenges does the future hold and how can they be addressed?
- How to map and identify weak signals, trends and megatrends that frame the options for innovative ways of implementing and financing European social welfare systems in the future?
- How to transfer these signals, trends and megatrends into meaningful and implementable future stories?

To tackle the unknowns of the future around social investments, this handbook emphasises foresightfulness instead of future thinking techniques. The handbook introduces the foresight flow consisting of three phases: sensing, sensemaking and seizing (flow by Koskelo and Nousiainen 2012). We provide examples of how the foresight flow was actually implemented in the InnoSI project.

This handbook is not restricted to particular professions. Whether you identify yourself as a local politician, a member of central administration, a volunteer in an NGO, an academic researcher, a businessman or ordinary citizen, we believe that you find this hands-on guide useful. Foresightfulness is not a privilege for futures researchers. Quite the contrary, foresightfulness can be deployed by anyone who is open-minded, curious and self-critical.

Futures thinking is a capability that can be developed and strengthened. This handbook is written in the belief that the more convincingly the future is told, the more it guides today's decisions. We have approached the future from a human perspective, not from the systems' perspective.

See more on the InnoSI project website: www.innosi.eu

“Foresightfulness is not a privilege for futures researchers.”

Introduction to Innosi Foresight Process

**THE FUTURE
IS NOT FREE
OF THE PAST**

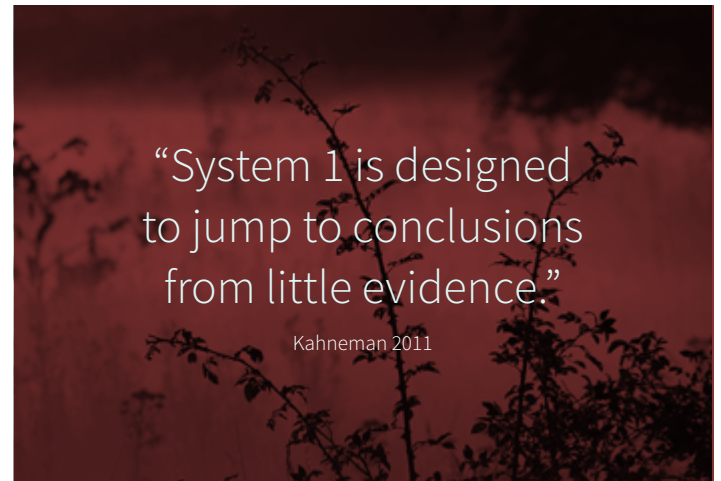
THE FUTURE IS NOT FREE OF THE PAST

How do robots change elderly care? Will they replace human workers and will we see unmanned drones used in the meal delivery service in sparsely populated areas during the next ten years?

We do not know what future holds. However, we do know that future is more or less dependent on the choices we make today. Similarly and unsurprisingly, decisions made in the past influence the opportunities we have today. Due to path dependency, every choice in the present is restricted by the past choices. Also, formal arrangements play an important role. An institutional lock-in refers to the dominance of regulations and contracts in the presence of one or more alternative(s). Path dependency and institutional lock-in explain the existence of sub-optimal trajectories.

The past not only influences today's possibilities, but also frames our ways of thinking the future. The psychological literature suggests that our reasoning is flawed in many ways. A rational person in a strict sense is an illusion. Variations between individuals exist, but what unites us as human beings is that when we observe our environment, we are biased to see what we want to see and ignore information that does not make sense to us. Perhaps our mind is not so interested in the truth than in the sustenance of balance. We deem the lock-in approach (Fig 1) as useful for illustrating some fundamental flaws in thinking the future. The lock-ins can be divided into three manifestations.

Firstly, we are vulnerable to 'functional lock-in'. Functional lock-in means that it is difficult to change the course of action. We prefer to do and think about things as they have always been done and thought about. Secondly, we are vulnerable to 'cognitive lock-in'. It refers to a specific world view that is



developed on the basis of social reinforcement. We tend to interpret information cues from our surrounding environment through the world view. Thirdly, we are vulnerable to 'political lock-in'. Political lock-in is based on the common interest shared in a particular community. We prefer to accept the future that is in accordance with vested interest and discard the future that threatens it.

Psychological research has found out that our thinking is structured around a dual-system model. "System 1" refers to automatic perceptual and cognitive operations, while "System 2" is the realm of conscious thought.

The numbering is important as it illustrates the sequence of our thinking. System 1 comes first, and it manifests itself in fast and often intuitive thinking. This type of thinking plays an important role in our everyday life. It allows us to do various things such as ride a bicycle, engage in conversations with our colleagues and spot life-threatening dangers. From the foresight's perspective, system 1 is necessary but insufficient as it mainly confirms what one already knows. The problem of system 1 thinking is that it does not include contemplation. System 2 is deliberative thinking which allows us to focus and immerse ourselves in the topic at hand. System 2 thinking is needed to make use of intuitive thinking provided by system 1.

Perhaps one secret of sound foresight lies in finding a balance between the two modes of thinking. Too much system 1 thinking leads to quick but flawed interpretations, while relying only on system 2 thinking brings no ideas that originate from intuitive thinking.

The habit of foreseeing
is elicited by the habit of
understanding. Foresight
is the product of insight.

Alfred North Whitehead

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PAST

PRESENT

FUTURE



Fig 1. The past influences the future.



**THE FUTURE
IS UNKNOWN**


THE FUTURE IS UNKNOWN

How does the refugee crisis influence European welfare societies? Is 'big data' a remedy for productivity challenges in healthcare or is it only one new threat to citizens' privacy? Does the significance of investors' ethical considerations boost the rise of socially responsible investing policies? How does climate change impact on migration within and between countries and continents?

Big questions without easy answers. We don't know what will happen in the coming years, let alone the coming decades. Although the future is always unknown, we cannot just sit and wait what will happen. The future may surprise us but our chances to survive depend on our preparedness. We must remember that to some extent, the future is an outcome of the choices and decisions we make today. The future is unknown yet simultaneously we are active creators of the futures. We need to create the desired futures with and for people – not only prepare or arm ourselves for the futures.

We can all learn to be active future designers. The nexus between the present and the future also means that it is our obligation to develop foresightfulness and to try to look at how the future can evolve from today to a future time horizon. In order to tackle the unknowns of future, we deem it important to understand the different manifestations of unknowns.

A good starting point is to accept that future poses us different knowledge challenges that require different approaches. On the one side of the continuum, there is either a lack of information concerning factual matters or the proliferation of information caused by the interdependencies between things. On the other side of the continuum, the challenge is not the



“It is our obligation to make forecasts and try to look at how the future can evolve from today to a future time horizon.”

lack or proliferation of information, but the lack or proliferation of insight and understanding which create interpretation difficulties related to the situation at hand.

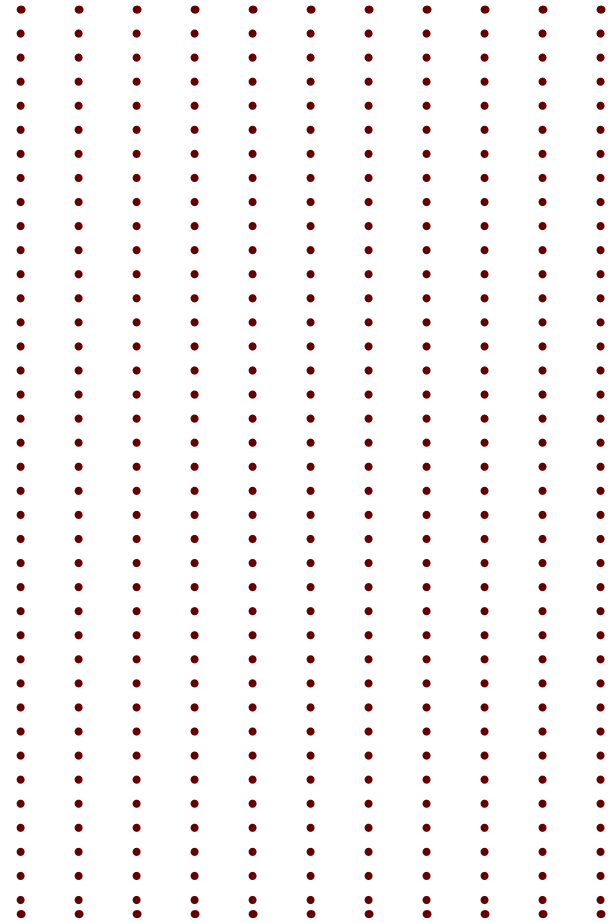
To cope with the future's unknowns we identified four specific epistemic challenges which are uncertainty, complexity, equivocality and ambiguity (Fig 2 & Fig 3). Uncertainty manifests itself in the lack of information and knowledge about facts, whereas complexity means the proliferation of information which originates from the interactions of things and actors. Respectively, ambiguity refers to interpretation difficulties related to the situation or phenomena, whereas equivocality means numerous different and often contradictory interpretations of the pros and cons of coming future.

Uncertainty means a lack of information and knowledge about facts. Information refers to a situation or a phenomenon which exists irrespective of the people involved in it. Uncertainty is the gap which opens between the information required in a certain task and the information possessed by an individual or organisation.

Complexity arises from connections between situations or phenomena. Complexity refers to situations and phenomena interacting in a non-simple way. Complexity also means that the direction and strength of the development of situations and phenomena are difficult, but not necessarily impossible, to predict.

Ambiguity refers to difficulty in interpreting a situation or phenomenon. In surface ambiguity, the interpreter has the relevant interpretative knowledge but it is difficult to apply because the available information does not trigger the process of meaning construction, where individual information hints are arranged as part of a larger framework of interpretative knowledge. In deep ambiguity, interpretation difficulties arise from the lack of relevant interpretative knowledge.

Equivocality manifests itself as different interpretations of a situation or phenomenon. Equivocality means a situation where the actors look at the phenomenon at hand through different 'lenses'. Even if each interpretation was unambiguous and logical as such, when combined with the interpretations of others, the end result is typically a contradictory explanation of things and phenomena, and it contains mutually exclusive views.



**Societal
Challenges
in Europe**

Examples of knowledge challenges

UNCERTAINTY

How many socially excluded young people will there be in a particular area?

COMPLEXITY

How the low-threshold family work at a child welfare clinic reduces the demand for more expensive care?

AMBIGUITY

How does the internet of things enable the smart healthcare?

EQUIVOCALITY

Should private investors be able to invest in welfare?

The most important decisions, with the greatest implications, are made in the present, before relevant knowledge is available.

Adapted from the article "High-tech, uncertainty and innovation"
by Mette Moensted in 2006

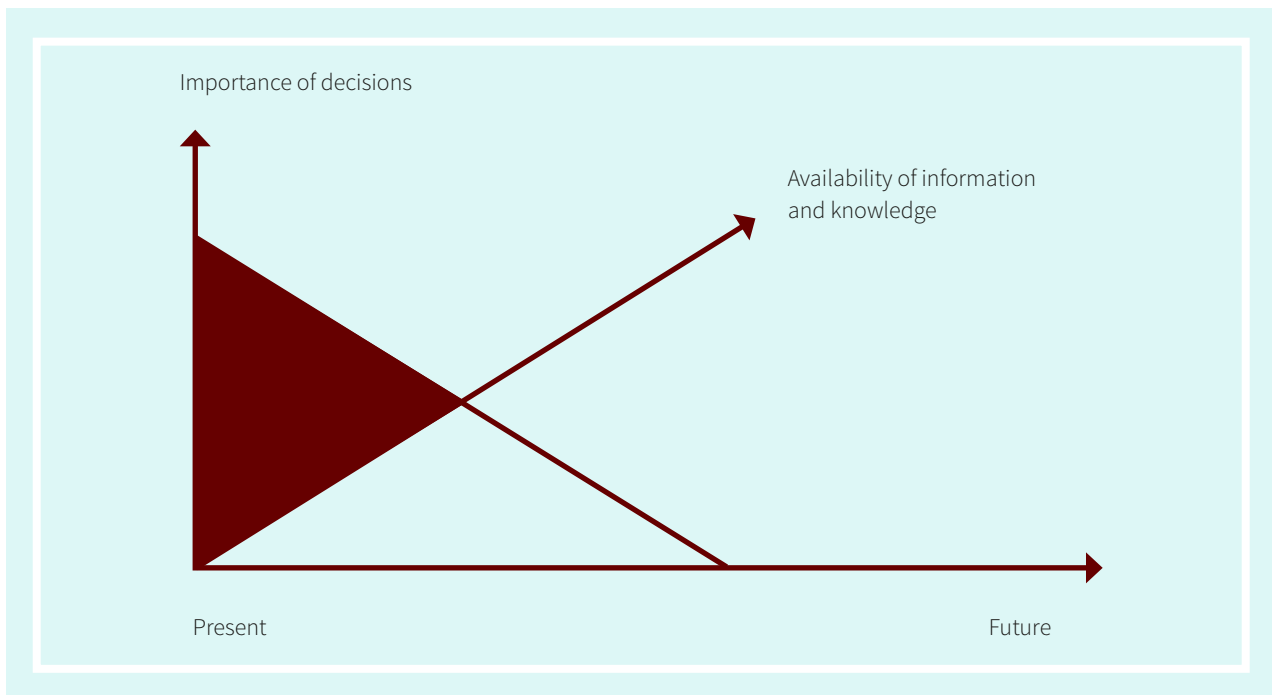


Fig 2. Decisions are made without relevant knowledge.

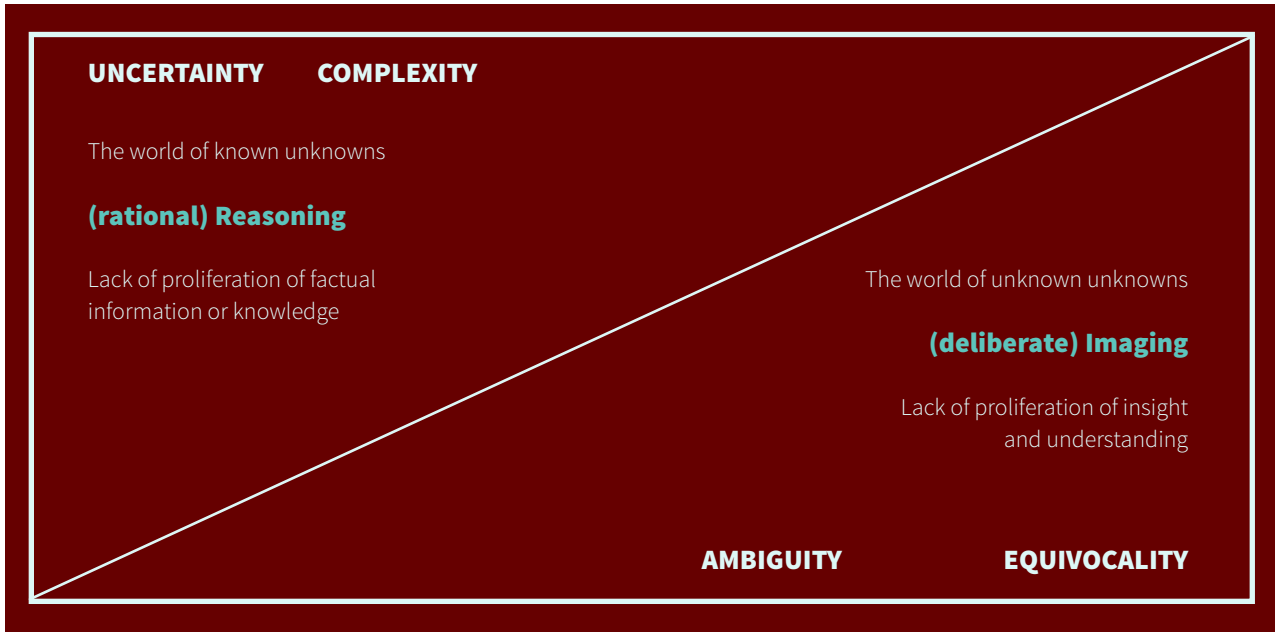


Fig 3. Different knowledge problems require different approaches.

The true sign of intelligence
is not knowledge
but imagination.

Albert Einstein



**DEVELOPING
FORESIGHTFULNESS**

DEVELOPING FORESIGHTFULNESS

Due to uncertainty, complexity, ambiguity and equivocality, the future always holds surprises and things unknown and unexpected to us. Future is an unfolding process, which cannot be fully described or predicted. Saying this, however, does not mean that we should meet the future unarmed. The only place for making an impact is here and now. What is needed are actions undertaken in the present with an eye to the future.

Since the origins of epistemic challenges vary from the lack of factual information to conflict of interests, the policies to cope with them need to be aligned accordingly (Fig 4). The first thing is to analyse whether we are dealing with a lack of information on something or if there is an issue which provokes conflicting interpretations. Secondly, we should carefully analyse what kind of knowledge challenges we are actually facing. Do we need more information about something or should we organise forums where conflicting interpretations can be discussed (even if not agreed)? Thirdly, and perhaps most importantly, keeping an eye on the future is more about social practices that encourage and sustain the process of foresight instead of a set of various future techniques.

Deep understanding of the differences between epistemic challenges and their practical implications with the commitment to foresight create a solid basis for foresightfulness. By foresightfulness we mean individuals' or organisations' ability to act in a manner that coherently connects past, present and future. Foresightfulness is a mindset rather than simply methodology.

Foresightful individuals and organisations do not predict the exact future but are prepared to engage with whatever may happen. Moreover, they co-create the future by navigating through epistemic challenges they face at the present.

“Foresightfulness is a mindset rather than simply methodology.”

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Reducing uncertainty by increasing information

Overcoming uncertainty requires two interlinked processes: explicit problem formulation and acquiring the missing information. The processes are intertwined, meaning that problems cannot be formulated without acquiring information and that the acquisition of information is useless without the formulation of the problem.

Simplifying complexity by improving knowledge capabilities

Complex problems are tricky to solve, however the complexity involved is not absolute. Complexity should be simplified by improving knowledge capabilities and by decomposing the complexity. The improvement of knowledge capabilities is based on developing rules and routines which promote the ability to locate, develop and bring appropriate knowledge, expertise, and skills to bear on the issues at stake, while the decomposition of complexity rests on restructuring and redefining the problems to resemble something more familiar.

Making sense of ambiguity

An ambiguous situation is challenging as it does not lend itself to a simple question-and-answer approach. Ambiguity cannot be solved by increasing the amount of information. The more crucial is the process of structuring the unknown and placing pieces of information into the framework that make sense.

Respecting the equivocality

Equivocality arises from contradictory points of view. Equivocal problems do not lend themselves to answers that can be accepted by all involved. Equivocality involves political and ethical-moral tensions and contains mutually exclusive views. Therefore, instead of “solving” problems including equivocality, it should be a matter of how to encounter them. In encountering equivocal knowledge problems, it is essential to respect the fact that one and the same event can be interpreted in different ways and from different starting points.

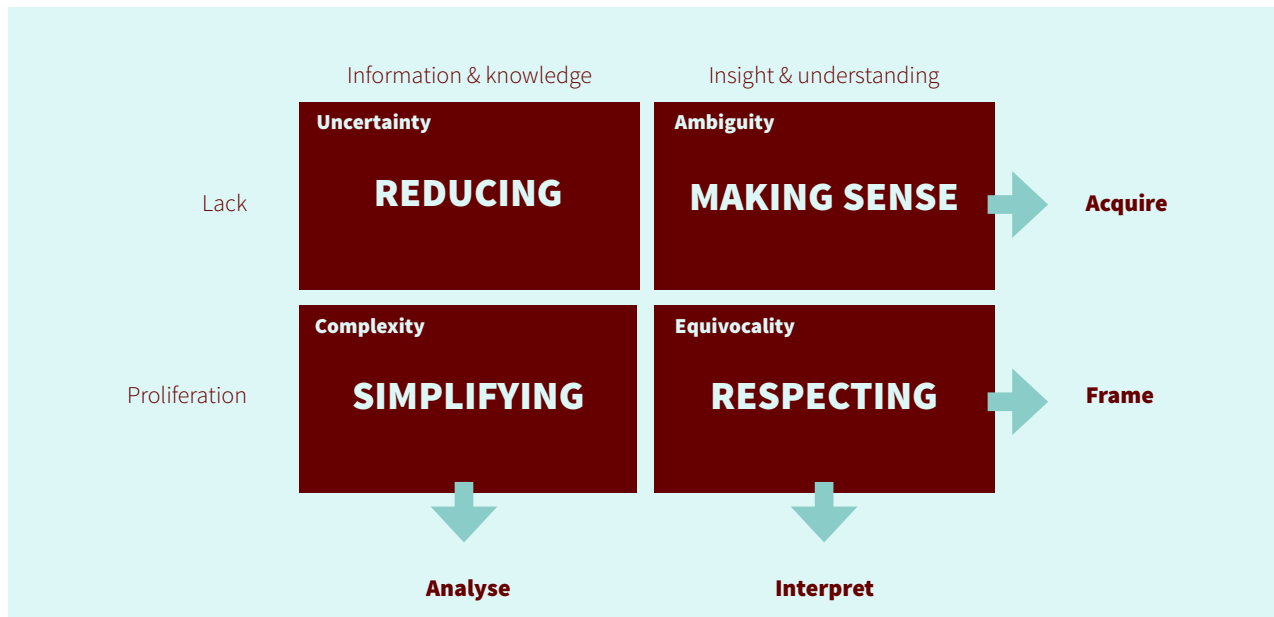

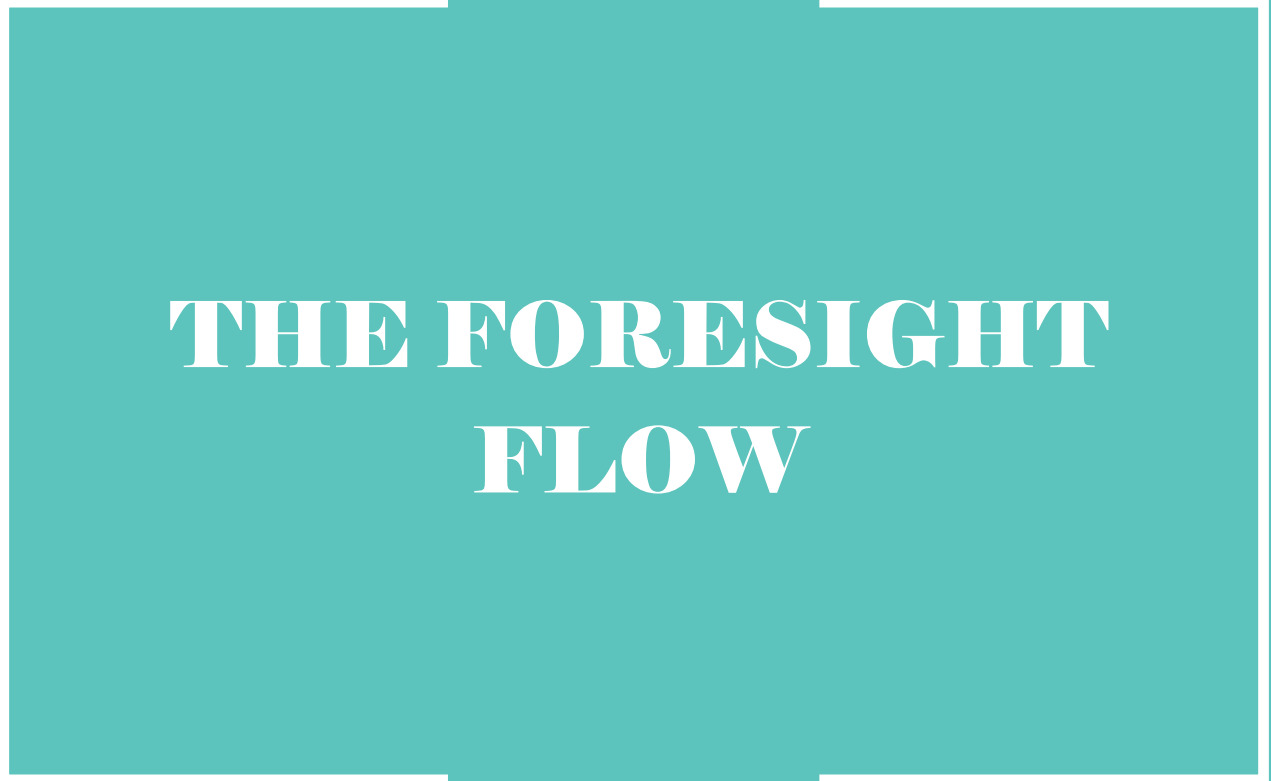


Fig 4. Ingredients of foresightfulness.

A long, straight road stretches into the distance under a cloudy sky, with a red color overlay. The road is flanked by fields and a fence line on the right. The sky is filled with dark, dramatic clouds. The overall mood is contemplative and forward-looking.

What does the development of foresightfulness mean in practice? How to achieve social practices that, on the one hand, encourage individuals and organisations to keep their eyes on the future, and on the other hand, guide them to connect past, present and future?

And most importantly, what does it actually mean to navigate through epistemic challenges in a way that supports the development of innovative social investments?



**THE FORESIGHT
FLOW**

BUILDING FUTURES FIT SOCIETIES

We believe that the future's core capability has to do with building lasting and meaningful value in people's lives. Therefore, we encourage our customers to figure out their unique role in the prevailing and future value creation processes. For this purpose, we have created a participatory human centric foresight process and methods for building and strengthening organisational futures fit capabilities. Each one of us can become a futures designer.

In this handbook we present the Futures Fit 3S process – Sensing, Sensemaking and Seizing – which is a combination of futures, design and systems approaches (Fig 5). The 3S process enables to recognise and analyse changes that can be translated into meaningful and thus futures fit value. By seizing the change and by creating new actionable solutions and opportunities, we become active futures designers.

The following chapters will go through each 3S phase from the future trends' point of view: how to gather signals about the futures (Sensing), how to interpret the signals into actionable



foresight (Sensemaking) and how to realise the desired future (Seizing).

The 3S process was applied within the InnoSI project, where each phase was carried out with local partners in 10 European countries with a specific focal question: "What constitutes social investments and thus wellbeing in 2027 in Europe?" In the context of social investments in particular, we wanted to pay attention to shared value creation and societal impact creation where 4P (people, private, public, planet) collaboration and People Primacy are required.

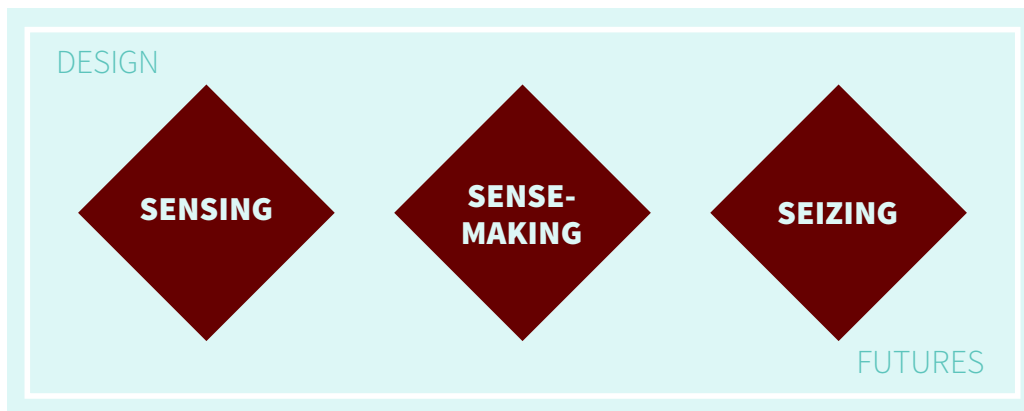


Fig 5. The Futures Fit 3S process combines systems, futures and design thinking synergies for the purposes of desired futures creation, new opportunity identification and solution design (Futures Fit, Koskelo & Nousiainen).

SENSING NOVEL SIGNALS

The foresight process starts with environmental scanning, Sensing. The focus and goal of the Sensing phase is to recognise signals of change: novel trends or weak signals that provide hints about the futures. At its best, sensing is an ongoing task in the organisations and not a rapid one-off strategic activity.

The Futures Fit Trends Framework (Fig 6) introduces important terms describing changes as megatrends, trends, signals and wild cards. Megatrends are changes that impact everyone everywhere. They have usually been around for decades and will continue to do so. Trends are changes in people's behaviour, practices, attitudes and values locally and globally. Trends, too, already exist and they have a specific direction. However, the maturity of trends varies. Signals are either new, surprising individual events referred as weak signals or novel manifestations of existing trends.

The Futures Fit Monitoring Tool (Fig 7) ensures systematic, focused, holistic and high quality Sensing phase. The focus for the signals gathering comes from the well-defined focal question and its related themes, contexts, actors and timeline.

Futures thinking is rooted in systems thinking: everything is interconnected. Signals can emerge anywhere and thus, it is crucial to be holistic in the Sensing phase. STEEPLED (Fig 7) provides a thorough checklist for investigating existing driving forces and novel signals. In a similar way different industries, sectors and topics need to be scanned around the focal question. If you spot a similar signal across sectors it means that you have spotted a possible trend.

Sensing is done in multidisciplinary teams to ensure a holistic approach and systems thinking view. The Sensing phase requires the utilisation of various methods of observation in order to fully harness people's senses, sources and networks.

“Futures thinking is rooted
in systems thinking:
everything is interconnected.”

Further, the quantity and quality of the data increases, and the most common pitfalls of Sensing (such as group thinking and too narrow scope) can be avoided. Diverse observation methods are inspired by ethnographic research common to both futures research and especially design research.

The Sensing phase and signals gathering aims at finding novelty. Novelty can be found for instance among the leading edge doers and thinkers, innovators and opinion leaders, marginal groups and niche interests. Often weak signals are hyperlocal phenomena. The “Diffusion of Innovation” curve is an applicable tool when evaluating the signals and their novelty: it sets a criteria for innovation and early adopter phenomena. Novelty can also be found in counter trends which are opposite future directions emerging from existing trends and megatrends.

In the participatory foresight process signals gathering is done transparently. Easy to use digital tools and social media (e.g. Pinterest, see Fig 8) platforms provide everyone a real time access and holistic view on what has been gathered so far, inspiring people to include new sources and directions for a shared “database”.

When spotting novel signals and drivers of change the most important question is “Why”: Why the signal exists and what it tells about people, their motives and practices. This question will be answered in the next phase, Sensemaking.

KEYS TO SUCCESS IN THE SENSING PHASE

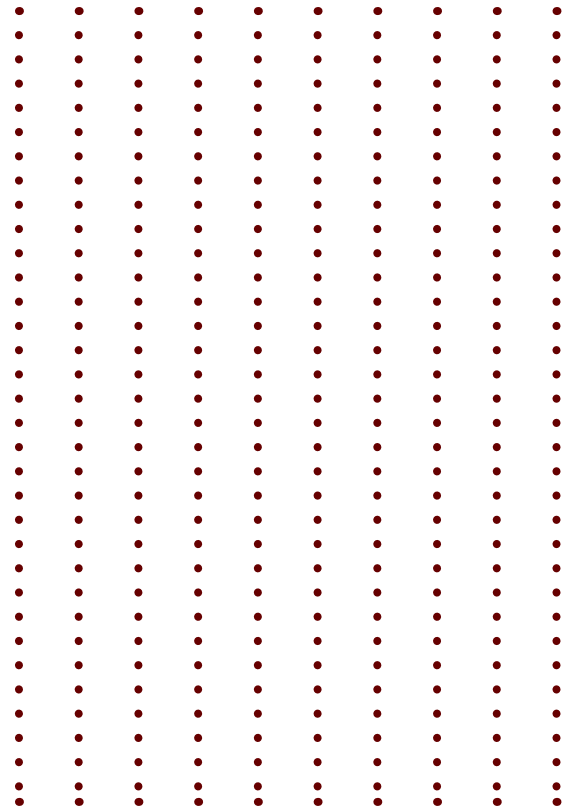
- Have a clear focus by asking what you are looking for and for what purpose. Formulate a focal question accordingly incl. actor(s), context, timeline and theme.
- Utilise STEEPLED to ensure a holistic view.
- Gather a multidisciplinary team to ensure systems thinking.
- Use various methods of observation.
- Make Sensing an ongoing activity to strengthen foresight capability.



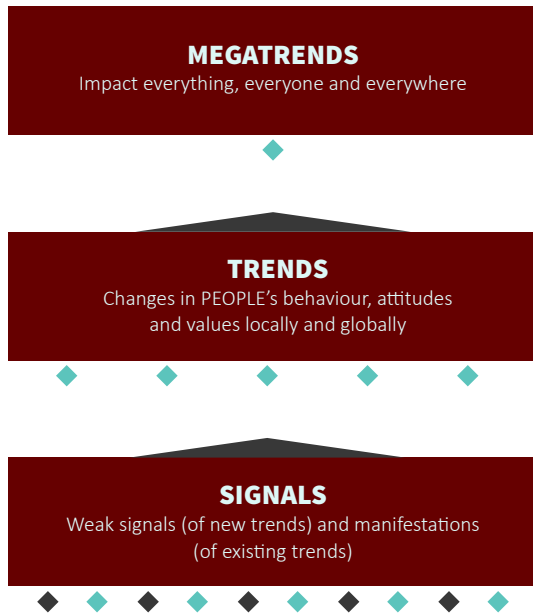
Monitoring future signals

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THIS IS HOW WE DID IT – SENSING



Wild cards

Fig 6. Shared vocabulary – understanding megatrends, trends, signals and their relations – is crucial throughout the participatory foresight process, and especially when scanning the environment and existing futures insights. (Snapshot from Futures Fit Trends Framework, Koskelo & Nousiainen.)

Fig 7. The focal question ultimately directs the focus in signals scanning. Simultaneously, a holistic view needs to be taken on what is changing (signals) and what are the driving forces (existing trends). (Snapshot from Futures Fit Monitoring Tool, Koskelo & Nousiainen.)

FOCAL QUESTION:			
What constitutes social investments and thus wellbeing in 2027 in Europe?			
THEMES:			
Upbringing and parenting	Aging and seniors	Immigration and refugees	Economy and labour market
STEEPLED:			
Social	Technological	Environmental	Economic
Political	Legal	Ethical	Demographics

SENSEMAKING OF SIGNALS

The Sensemaking phase is about analysing the data – systematically and intuitively. Therefore, the signals gathered in the Sensing phase are approached through various angles: their affinities and linkages, their novelty and quantity. The goal of the analysis is to find patterns and perspectives for the signals, to group them around common nominators and to formulate initial trend topics for the focal question.

The next step is to take each trend topic and their signals under investigation, and create future headlines for the focal question: what does the data tell you about the futures? Each future headline should make one independent statement about the change identified. Further, each headline should state something about people and their values, attitudes, motives, practices and behaviour.

The most interesting, relevant and potential future headlines will be further analysed and processed on a Trend Wall (Fig 9).

Trendcards as Tools

The evolution of the future headlines and related signals are being built and the change is further analysed with Futures Fit Trend Wall: what has happened in the past (hindsight), what is the current state of the future headline (insight) and what is likely to happen next (foresight).



Fig 8. UK's InnoSI Pinterest pinboard. Pinterest is a free website in which users can upload, save, sort, and manage images – known as pins – through collections known as pinboards. Users can browse the content of others in their feed. We added items to the board and wrote key words and 1–2 sentence short descriptions of why the pin was interesting in the context of the InnoSI project.

Visualising the evolution storyline on a Trend Wall activates our brains to continue the story by asking “what next” and “what if”. The evolution storyline ultimately leads us to think “why”: why the future headline could happen and what are the prerequisites for it to realise. The Trend Wall should therefore identify these driving forces: existing trends and innovations that influence the future headline by enforcing the change and by pushing it forward. Consequently, the Trend Wall can include the hindrances of change for each future headline.

In the Sensemaking phase, potential weak signals can be identified on a Trend Wall since weak signals do not have a recognisable past. Their future is hard to predict but their novelty value is so high that they should be further monitored as potential signposts of the new future direction and trend.

In order to crystallise the future headline and to make it understandable, comparable and actionable, they must be described in a consistent way and form. For this purpose each headline with related content in the Trend Wall is being transformed into a Trend Card. A Trend Card is a tool that enforces the exploration of alternative futures. They can be utilised in various ways: in expert discussions, in ideation, in testing new ideas, in enriching sales speech and in decision making. Trend Cards are very effective when validating the future headlines with experts, creating common ground for the desired future or building scenarios.

A simple yet effective Futures Fit Trend Card (Fig 10) usually includes a thought-provoking picture, an engaging and opportunity holding title, a one-liner that states what is actually changing, and a concise description of the change and its impact on people. Trend cards should always have a multifaceted set of manifestations, which are both examples and evidence of the trend: they concretise the change by presenting new services, businesses, research and patents related to the trend. Manifestations can also highlight local flavours and nuances of the trend worldwide.

KEYS TO SUCCESS IN THE SENSEMAKING PHASE

- Utilise various ways to approach data: inductive, deductive, abductive, intuitive.
- Spend time with data and focus on the drivers of change and evolution of change.
- Stay with the focal questions: ask “why” and “what if”.
- Investigate spotted trends from the people’s point of view: focus on opportunities and making an impact.
- Trend cards work best when there’s a pile of them including various perspectives (e.g. STEEPLED), and you can mix and play with them to create alternative futures.

Further reading

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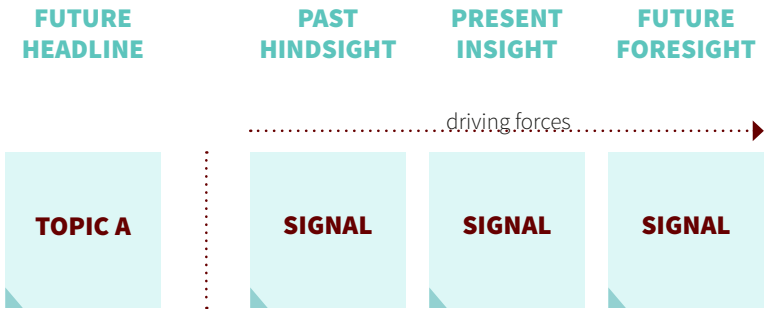
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THIS IS HOW WE DID IT – SENSEMAKING



AFFINITY WALL



TREND WALL

Fig 9. Signals gathered in the Sensing phase are analysed and approached especially through their affinities and linkages in order to spot patterns of change. Affinity clusters are further processed into Future Headlines and their evolutionary stories (Trend Wall). (Snapshot from Futures Fit Trend Wall, Koskelo & Nousiainen.)

SHADES OF INEQUALITY

A

FROM WEALTH POLARISATION TO SOCIAL LONGTAIL

While polarization and wealth gap advances, and chronic poverty follows vulnerable groups and regions, the longtail of social challenges hit individuals in various forms. The new segments of social mismatches caused by sudden labour market challenges, growing mental health issues and drug problems can find everyday individuals and identify them as the “new poor”.



Driving forces

LABOUR MARKET CONDITIONS
PUBLIC SERVICES AND WELFARE CRISIS
GROWING WELLBEING AND HEALTH ISSUES
WEALTH AND POWER POLARISATION

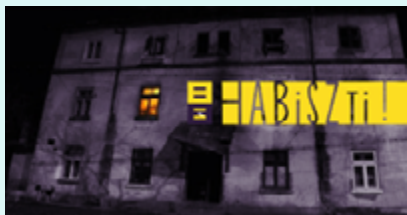
Keywords

INEQUALITY, POVERTY, TRANSGENERATIONS,
SOCIAL INNOVATION, SOCIAL CARE,
PUBLIC SECTOR, NEW POOR, WEALTH,
SOCIAL LONGTAIL

Fig 10. A simple yet effective trend card (A) consists of a thought-provoking picture, an engaging title, a one-liner that states what is actually changing and a concise description of the change and its impact on the people. Manifestations (B) concretise the trend and show its multiple realisations. (Image: Futures Fit Trend Card)

SHADES OF INEQUALITY

B



Transgenerational transmission of inequality and poverty advances. Not all support models succeed and might even increase the wealth gap. (Pic / Chachipe)



Public sector and the relationship between the state and the individual is reforming with new approaches such as Basic Income (thersa.org)



63.7% of young Spanish with over a 30% disability are unemployed. Vulnerable social groups require methods of early intervention and prevention. (Pic / newpost.gr)



Poverty is not always a visible phenomenon, it lives behind closed doors. There are the “new poor” of the society. (Pic / Whitewraith)

SEIZING IMPACTFUL OPPORTUNITIES

Trend cards are descriptions of the changes relevant to the focal question and means to activate people. In order to seize the change, we need to first test and validate the foresight from the Sensemaking phase and secondly, to identify and concretise future opportunities based on validated foresight.

Delphi is an excellent way to validate, test and enrich the identified trends. A set of trend cards can be shared with a multidisciplinary group of experts who individually analyse trend card contents based on their knowledge and insights: which trends are relevant and probable for the focal question, which trends are desirable and why, and what is missing? Qualitative and quantitative responses are gathered in multiple rounds of questions aiming at common understanding, priorities, and emphasis on the focal question.

An enriched and validated set of trend cards becomes a powerful tool for understanding the impact on people and their futures: their everyday lives, the related value creation processes and actors in the scope of the focal question. In the 3S process this is called People Primacy. By placing people at the centre of the change enables envisioning and concretising the future contexts through the eyes and needs of the people and thus, unchaining our minds from the existing structures and constraints. The future does not just happen, but people and value creation actors around them are the ones co-creating and realising the desired future. Therefore, here the focus should be on opportunities and impact; translating possible risks and threats into opportunities.

When seizing the change and ideating future solutions, we highly recommend to interpret trend cards through personas (descriptions of the different people and actors relevant for the focal question, see Fig 11). In other words, with every trend

Designing Desired Future



card the question is formulated through a person: if the change were to happen then, what is the impact on the person's everyday life?

Further, a design thinking method and a storytelling tool called "A day in the life" can be utilised to concretise trends' impact on the person. For instance, in a co-design workshop people go through an ordinary day – from the morning until the night – and record the impacts of each trend card for that storyline.

In the InnoSI project we developed future stories of four European citizens, William, 71 years of age (see Fig. 12), Assim, 38, Heidi, 50, and Laura, 29.

The outcome is an easy to approach and understandable story about a person and his future life enriched with the solutions, manifestations and ideas for the focal question. Futuristic stories can be translated into engaging and inspiring opportunities, alternatives, and vision statements for the focal question. These stories and visions invite related value network actors to collaborate and further co-design their shared desired future.

With the help of these alternative, multiple and concrete people centric storylines it becomes easier to analyse the driving forces and hindrances of change towards the targeted future state. In other words, to backcast what is required from the value network actors in order to realise the desired future. Therefore People Primacy in foresight helps to tackle one of the biggest challenges in futures research: the challenge of timing.

The more concrete one can be with the alternative futures the more understandable, approachable and actionable the futures become. Those co-creating experiential people centric futures stories with tangible interfaces and prototypes, are the ones leading the way.

“The more concrete
one can be with
the alternative futures
the more understandable,
approachable and actionable
the futures become.”

Further reading

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THIS IS HOW WE DID IT – SEIZING

Senior citizen William, 71

LIFE SITUATION:

- Retired, worked as an electrician.
- Lives independently in a nice suburb.
- Wife died a couple of years ago and his children live far away.
- Interested in sports.
- Health: overweight, but still in quite good condition.
The first symptoms of Alzheimer's disease have appeared.

INTERESTS:

- Sports.

NEEDS & WISHES:

- He likes children and would like to help families in the neighbourhood.
- He is missing company for e.g. attending sports events.

CHALLENGES & STRUGGLES:

- Deterioration of physical and mental health.
- Coping at home and taking care of daily chores.
- Friends passing away and long distance to family members lead to loneliness.
- Lack of IT competence.

DREAM:



See other
future stories
on page 47.



Fig 11. Personas are descriptions of the different people or actors relevant for the focal question. Trend cards are interpreted through these personas: if the change were to happen, then what is the impact on the person's everyday life?



KEY TAKEAWAYS

KEY TAKEAWAYS

Social investing represents a new approach to old problems such as youth unemployment, the disequilibrium in the labour market, parents balancing between family and work, and the integration of refugees and migrants. Social investments build on the idea that regardless of their actual situation, people always have capacities that can be mobilised by well-designed policies.

Obviously, what is a “good” policy in the future cannot be known at the present. However, the odds that actions taken today are congruent with the desirable future, can be increased by paying attention to the diversity and coverage of exploring the future and by ensuring that signals and trends identified are also transferred into meaningful and implementable future stories.

Exploring the future is fruitless if it cannot be described in a form that speaks to people. On the other hand, fancy stories are worthless if they are not grounded in the context they are supposed to fit.

“Exploring the future is fruitless if it cannot be described in a form that speaks to people.”

Believe that alternative future can be researched from the present.

Imagine that futures thinking is a capability that can be developed and strengthened.

Recognise the institutional and historical trajectories that frame the political landscape.

Identify and define the nature of knowledge problems (uncertainty, complexity, ambiguity, equivocality) you are dealing with.

Improve your foresightfulness by utilising proven methods to address different knowledge problems.

Ensure the diversity of people and methods used in sensing novel signals.

Make sense of signals by utilising various techniques (inductive, deductive, abductive, intuitive) to approach data and by clusterising signals into meaningful trends.

Focus on new opportunities for people.

Seize the opportunities by engaging relevant stakeholders and co-designing with impactful future stories.



**TRENDS AND
DRIVING FORCES**

BUSINESSES' SOCIAL IMPACT

From philanthropy and greenwashing to socially and economically justified business

Companies are accused of being the major cause of social, environmental and economic problems. To avoid criticism of prospering at the expense of the broader community, companies try to communicate their social responsibility by launching projects that target social issues.

Two main streams can be identified: on the one hand, large companies are using social responsibility as a marketing strategy for their own good and on the other hand, social economy/entrepreneurship is rising but is still in margin. New regulation would be needed in order to boost the social impact of business.

A new generation is growing, and it which demands more social responsibility, but the demands might be too weak and capitalism continues to prove more powerful. The polarization of consumers may lead to a two-class-society when others prefer socially engaged companies and others cheap chains.

Public authorities are expected to develop models that speak to private investors, and new financing instruments e.g. Social Impact Bonds and Social Investment Funds are released. States' role in providing services is decreasing and new partnerships between NGOs and companies are launched. This can mean higher quality of social services as many companies and NGOs are more rooted in the local communities. Specific groups of people, the most vulnerable people in particular, can benefit a lot from the rise of social economy – this is visible especially at the time of crisis.

Driving Forces

- The rise of consumer awareness of climate change and the shortage of natural resources are posing new requirements to business.
- Companies are exploring innovative and ethically and socially sustainable business opportunities.
- Changes in the regulatory framework and financing arrangements speed up the development of new alliances between the public sector, companies and civil society to address complex societal problems.

Key words: corporate social responsibility, shared value, social impact, social economy, social entrepreneurship, public-private partnership, globalization

DIGITALIZATION OF EVERYTHING

From big data to intelligent life improving services

Digitalization and technology are a part of people's everyday life and influence all the fields of human activity. Digitalization makes people's lives easier in many ways: e.g. by enabling people's connections, peer learning and support. However, there's also a risk of social exclusion of people who are afraid of new technologies or are not able to reach them because of a rural location or poverty. People without access to these networks or databases can be socially, economically and politically excluded from the global processes. There's a danger that this leads to a new global inequality, which may strengthen the already existing inequalities.

Big data, whether from large public sector databases or from social media, is increasingly being combined with artificial intelligence, virtual reality and robotics to start creating new approaches to deliver public services. In the future, technology will deliver new service interfaces that promise to be more efficient and flexible. The development of e-government can make the public sector more open and citizen-friendly. Digitalization changes the labour market: many jobs, mainly doing with routine tasks are disappearing, whereas others are emerging.

Digitalization enables solutions that can be used for helping or substituting human labour. Robots will partly replace human workforce. Healthcare and social service providers and their services have to adapt to patients' increasing need for digital solutions. They have the potential to empower people to have more control over their lives, e.g. to manage their own health care records, share wellbeing data, communicate with their care team with trusted people through patient portals etc.

Digitalization changes social life as social intercourse happens more often virtually and in social media. It enables peer support, but we can also forget the importance of face-to-face relationships. Privacy and ethical questions become important. Digitalization can make us more vulnerable (e.g. hacking and terrorism), and network surveillance limits the freedom as people become more predictable and governable.

Driving Forces

- Digital technologies break down industry barriers and create new opportunities while destroying existing operational models.
- Virtual and augmented technologies permit the simulation of and interaction with the reality.
- Artificial intelligence and deep learning blur the distinction between machines and humans.
- Robotization enables either fully or partly automated services.
- Intelligent, connected and self-learning machines pose unexpected ethical and existential challenges and threat the protection of vulnerable groups.
- The over-reliance on technology takes away the aspect of human interaction.

Key words: digitalization, big data, internet of things, artificial intelligence, virtual reality, augmented reality, deep learning, robotics, sensors

DIVERSE HUMAN-CENTRICITY

From monoculture to individuality and human-centricity

Technology and awareness enable a shift towards individuality. One size hardly fits all. Even marginal groups and extreme phenomena are becoming visible. More support and attention are targeted towards marginalized groups. The availability of tons of information makes it possible to uncover many issues of groups which were invisible before. Sharing and collaborative economy can save money and environment and challenge the current form of capitalism.

In a time of immense economic crisis, the way both the state and the society can respond to welfare is challenging. Vulnerable groups need protection. People and communities have to take more responsibility. Civil society is on the rise and there are more self-help and community-based solutions, ideas and innovations. People are providing help where the welfare state is not able to. People are given more power to design their own services according to their individual needs and this leads to more effective solutions. Personalized and co-produced services are maximizing the resources and producing innovative solutions. The number of informal civic networks is expected to rise rapidly.

At the same time the concern is those communities and people that aren't able to develop community responses. If structural inequalities are not addressed, the scale of improvement of vulnerable groups' conditions will stay limited. Individualism can have a negative influence on social ties as well. Outsourcing the welfare state to self-help and non-profits which may be less reliable and may lead to inequality between citizenship groups. In order to avoid this, new solutions and relationships between public and non-profits are needed.

Driving Forces

- Big data and internet of things enable the development of smart and tailored/personalized services.
- The importance of value-driven organizations in civil society is increasing.
- Increasing pursuit of meaningful living in contrast to materialism.
- Citizens are seen in service design processes as co-creators, not only as beneficiaries.

Key words: human-centricity, smart services, resource efficiency, communities, smart cities, welfare, sharing economy, solidarity, inequality

FAMILY ON THE RISE

From a life-work balance as a question of legislation to a change in personal and cultural values

Family and gender role models are transforming and affecting the labour market. The operational change for women to participate more in working life may generate new legislation concerning labour law and family allowances or maternity and paternity leave. However, on a wider scale, the advancements in gender equality and work-life balance base on personal, organizational and cultural values and changes are slow. Education is one key to transforming cultural gender values so that equality is not only recognized at the institutional level.

Welfare services need to be adaptable to the diverse needs of the new family models: they must take into account the needs of the families with two working parents and single parents. New service needs create both challenges and possibilities for public, private and third sector actors. When women work, more resources are needed at the day care services and at the same time, families search for new solutions for coping with their domestic work.

Family ties are becoming more important again but diversity is the new standard. The extended family can mean close interdependence with grandparents as well as close interaction with the neighbourhood or other social network. The aging population also creates new forms of intergenerational cooperation in housing and care services.

Digitalization helps to increase the use of flexible working arrangements such as working from home. More people can choose to combine family and work.

Driving Forces

- Women's emancipation promotes changing the gender roles in home and at work.
- The emergence of "she-economy", i.e. female-oriented consumption.
- The notion of "core family" is diversifying due to low fertility and aging population.
- New family services are created through co-operation between public, private and third sectors.
- ICT both advances and inhibits achieving work-life balance.

Key words: labour market, labour market barriers, gender equality, work-life balance, family politics, career, blended families

REDEFINING WORK

From being employed to new ways of creating value

Work and the labour market are being redefined due to global unemployment and the changing nature of work towards automation and knowledge work. Work changes every single day and nothing is stable. There's a need for work flexibility in developed countries. It's important to teach young people how to learn during their whole life.

More people are self-employed but not necessarily through choice. This makes it very difficult for people to have any security and creates a growing risk of working poor. The labour market will be much more segmented: high-skilled people get more interesting and more flexible jobs, the less skilled run the risk of being even more marginalized. There will be a push of large groups out of the labour market permanently and this can mean the rise of stress and mental health problems. The unsustainability of the labour market and stress related to that can lead to the increase of radical moods. The welfare system may collapse due to too few tax payers. Social economy and the voluntary sector will grow.

New forms of collaboration arise and the infrastructure needs to support this shift. Technology, such as 3D printing and internet of things solutions enable manufacturing anywhere. Hyperlocality arises as work can be done anywhere – there will be more virtual employment.

Driving Forces

- Globalization benefits high-performing professionals and punishes low-performing workers.
- Many occupations become threatened by the automation of work.
- Traditional employment is significantly reduced, while the sharing economy with digital platforms creates new working opportunities.
- Digital crowd platforms enable new forms of organization and innovation, e.g. digital craftsmanship.
- Digital hobbies – such as gaming and content creation – become valuable assets in labour market.
- Immigration stimulates European economies and immigrants become a source of talent and European bridges to Africa and Asia.

Key words: work, millennials, labour market, technology, unemployment, self-employment, virtual work, mobility, digital platform

RESOURCEFUL SENIORS

From retired pensioners to resourceful citizens

Along with the aging population the focus on seniors is inevitable. Seniors are facing various challenges in the society from the state of inequality and poverty to the feeling of being a redundant citizen. Depopulation increases many challenges of senior citizens in rural areas, whereas isolation and loneliness can be problems also in bigger cities.

The responses to the trend vary from volunteering and community-based services to senior-targeted offerings and transgenerational social care solutions. Reciprocity in giving and receiving help makes the society more humane. At the same time, new technological solutions and equipment help the elderly in many daily routines.

The existence of the silver economy creates a counterbalance to the youth-centred culture. Seniors are an important group of consumers and this is taken into account in the design of products and services.

The need to stay active in the senior years is two-dimensional. Firstly, participation in civil society can be empowering and it supports individual well-being and secondly, the efforts can be valuable to the economy by decreasing the social and health care costs.

Pension reforms change our understanding of a career. New structures of senior employment and mentor programmes are developed in working life based on respect for the expertise and knowledge of the elderly.

Driving Forces

- The rise of the silver economy changes attitudes towards elderly people.
- The emergence of intergenerational relations, such as the sharing of a household.
- Modern medicine enables us to live longer and healthier.
- The demographic bias prevents European societies' ability to renew themselves.
- The elderly become excluded by digital technology.

Key words: seniors, aging, demographics, silver economy, third age, social care, healthcare, inequality, senior services, senior solutions, intergenerational

RETHINK EDUCATION

From one size fits all to passion based learning

Novel forms of learning and education are being identified in order to respond to labour market changes, various social needs and wicked problems. However, education is not only a tool for employability but it has a role of upbringing citizens. Peer learning and growing up together with minorities develop human and open-minded citizens.

Human-centred sciences drive future oriented talent and individual oriented solutions including less privileged groups. Individualized study paths, use of e-tools and learning by doing methods reduce school dropouts. Schools provide support in learning difficulties and encourage those who have a talent or passion for something.

The focus is on learning how to learn and learning activities can happen anywhere. Technology transforms the education system – e.g. improves data collection, provides global online and open education material, and offers new learning methods such as simulations, trials and gamification. Technological advancements and private–public collaborations prepare the youth for the future. New models of education enhance curiosity and creativity of the students. Schools encourage those who have a talent or passion for something.

Driving Forces

- The transformation of work forces the education system to change.
- Multicultural working environments require a new set of soft skills.
- Working with learning robots and machines requires new skills.

Key words: education, learning, pedagogy, school, life-long learning, career, working life, skills, competences, millennials

SHADES OF INEQUALITY

From wealth polarization to social longtail

While polarization and the wealth gap advances, and chronic poverty follows vulnerable groups and regions, the longtail of social challenges hits individuals in various forms.

The new segments of social mismatches caused by sudden labour market challenges, growing mental health issues and drug problems can find everyday individuals and identify them as the “new poor”. Disadvantages pass down in the family.

Stronger segregation between the rich and poor leads to a wider misunderstanding between classes. Unwillingness to participate in the financing of the welfare services is rising among the successful in the society. Harsh attitudes and values can be seen in the political rhetoric as demonization of poorness and unemployment. Individual misery and disappointment can evolve into further riots and explosive conflicts.

Changes in the taxation system and new forms of capital distribution are tested in order to prevent the collapse of social system.

Driving Forces

- Globalization divides people into winners and losers.
- The stickiness of poverty persists across generations.
- Toughened attitudes towards vulnerable and strangers.
- Polarization of digital abilities between citizens.

Key words: inequality, poverty, transgenerations, social innovation, social care, public sector, new poor, wealth, social long tail, refugee crisis

SOCIAL MOVEMENTS

From local voices to fast moving global movements

Digitalization increases social awareness and enables people to form movements around different causes and shared values. People can be associated by their passion to create something new as well as to fight for their rights. Participation happens more often in collective and spontaneous actions for a particular purpose instead of long-term commitment to institutionalized organizations.

The rapid diffusion of social media has changed the political discussion. It has enabled two intertwined processes: globalization of local events and localization of global events. Social media is an example of technology that not only increases or decreases something but transforms it into something totally different. Social media has the potential to change the thoughts we think about, the ways we deal with the thoughts and the communities where the thoughts have come about.


Social media is neither good nor bad. Instead it can be seen simultaneously as a solution and as a problem. While social media expands the information pool from which to draw decisions, it also simultaneously generates contradictory information that makes it difficult to achieve consensus. Distrust for authorities leave frustrated people to look for like-minded people globally. Social movements spread via social media and push decision-making. Political leaders are challenged to take a stand and policy makers are forced to answer for demands of openness and transparency.

Media literacy is a vital competence while often the loudest voices are best heard. The challenge is to find a balance between the demands of strong but marginal activist groups and the necessities of the silent majority.

Driving Forces

- The rapid growth of social media platforms that enable fast, low-cost and boundless communication.
- The emergence of global citizenship and global activism.
- The inward-looking and national movements capture the European political landscape and the post-truth politics becomes something of a new norm.

Key words: globalization, localization, movements, social media, digital crowds, nationalism, conflict



**FUTURE
STORIES**

William (age 81, year 2027)

Not a retired pensioner but active citizen

At 81, William has lots of contemporaries. The baby boom generation born after the Second World War has made its mark on the European welfare societies. Like many others who have passed their 80th birthday, William lives independently and copes in his daily life with the assistance of technology and his community. A new drug introduced to the market has considerably slowed down the progress of Alzheimer's.

During weekdays, William has breakfast with a family that lives next door. The arrangement is favourable for both parties, since William keeps the family's children company before they go to school. The children enjoy their time with William, since he likes to tell them not only about his life but also about the developments that revolutionised Europe. The fall of the Soviet Union and the breakdown of the Berlin Wall are history too ancient for the children. However, the migration throughout the 2010s and 2020s is something the children like to ask questions about, since their circle of friends consists of children from over a dozen nationalities. The children find it hard to believe that this was not always the case.

William keeps in touch with his own family primarily through virtual means, which is easy thanks to the modern devices that utilise artificial intelligence and speech recognition. William's children have organised a weekly family dinner over the Internet. This livens up William's daily routines and also offers William's children and grandchildren living abroad an opportunity to get a glimpse of their old home country.

Technology makes William's daily life easier. William, a bit amused, recalls how at first he was opposed to the care robot offered by a nurse, because the robot provides unparalleled assistance and helps him cope at home. The robot administers

his medications and reminds him of regular mealtimes and other daily chores. William uses a meal scanner to check the energy content and nutritional value of the portion he prepares himself. In particular, William likes the applications based on machine learning, since they adapt to his daily routines. However, even William is not ready for everything. William does not quite know what to think about an old coworker, who says he has a robot as his girlfriend. William is also puzzled over the meal delivery service which uses unmanned drones in sparsely populated areas. William has been pleased to read in the paper that the technologies and various technical devices utilised in the care of seniors have generated increased interest in the care sector among boys.

“The technologies and various technical devices utilised in the care of seniors have generated increased interest in the care sector among boys.”

William has always liked sports. When he was younger, William played football actively, and now he likes to exercise and watch sports on TV. Since the passing of his wife, William has participated in a weekly virtual exercise session with other men. The exercising is real, but it is instructed virtually. The real-time image and sound provide a sense of community between William and the other men working out in their own homes. As a sports fan, William likes to follow football, in particular. Football has been an important part of his life since at least the 1960s, and today he is a walking (although at times a walker-using) football encyclopaedia.

William has Alzheimer's but never ceases to amaze his family members and friends with football-related memories. His grandchildren are proud to say that granddad may forget where he put his house keys but he never forgets the scores he saw at the Derby games.

William is also a member of the seniors' circle of the local football club, which is sponsored by a multinational utility company, his former employer. The members of the seniors circle receive door-to-door transport from their homes to home games, and junior players also give them a hand in heavy chores around the house. The members have lots of stories to tell and are thus welcome guests at the football club events.

William knows that from the biological standpoint, he is still not even close to his maximum age. The medication he takes to slow down Alzheimer's has started promisingly and given him a new faith in the future. This attitude has also been reinforced by William's role in bridging the past, present and future generations. He is increasingly convinced that even though health issues go hand-in-hand with advancing age, technology and a new kind of communality make a person's ability to function less and less dependent on age.

See William's Future Card on page 35.

“He is increasingly convinced that even though health issues go hand-in-hand with advancing age, technology and a new kind of communality make a person's ability to function less and less dependent on age.”

DREAM:

Working mother Heidi, 40

LIFE SITUATION:

- Family: husband who works as a surgeon and two children (2 and 7 years old)
- Lawyer in public court
- Health: in good physical condition, but suffering from stress

INTERESTS:

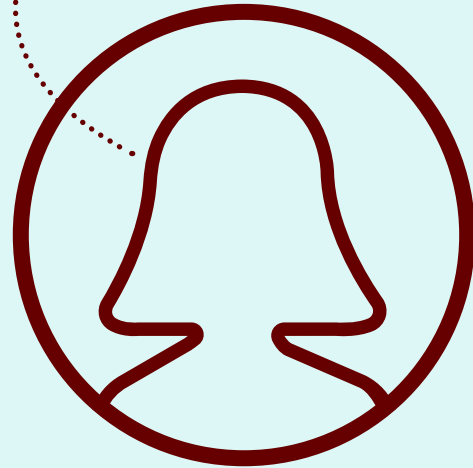
- Human rights, photography

NEEDS & WISHES:

- Needs reliable and flexible daycare and assistance with children
- She wishes to advance in her career

CHALLENGES & STRUGGLES:

- Combining career and family life is challenging
- Keeping up with rapidly changing working life
- Lack of flexibility at the work place



Heidi (age 50, year 2027)

Eco-friendly working and socially responsible living

Ubiquitous computing has influenced the daily life of people and changed the power relationships in and between organisations and people. Defining network surveillance and the rights of individuals has become a topic on political agendas around Europe. For the 50-year-old Heidi, this development has created new interesting but challenging job opportunities.

In particular, Heidi is interested in ethical and legal questions related to data ownership as well as the risks posed by network environments on human rights. Heidi is concerned about the power of information networks: they make it possible to bypass the principles and institutions of the constitutional state and to administer “justice” online through the power of the masses. Related to these questions, Heidi is involved in several projects and has several sources of income, such as a part-time attorney’s position in a global human rights organisation, public sector consulting projects, and her own company, which offers legal advice online. Work is fragmented, but for Heidi, being able to work flexibly and to do so in accordance with her own values is important.

Heidi and her family live in an energy-neutral eco-building, in which the latest solar energy technology is used in the cladding and roof materials. The house has a separate, sound-proofed room for evening and weekend work, since Heidi and her surgeon husband both work partly from home. Technology has made it possible for a surgeon to perform most routine operations remotely. Tax reliefs have been introduced on remote work, since it facilitates the balance between work and family life and reduces commuter traffic.

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Heidi has absorbed the philosophy and understanding of one shared world. She knows that mitigating climate change is the greatest global challenge of her generation. Heidi’s environmental awareness is not limited to accommodation and transport, but she keeps a close eye on her family’s carbon footprint and also pays attention to the family’s eating habits. When it comes to meals, Heidi has two principles she tries to hold on to: on one hand, she prefers locally produced food instead of food from global food companies and retail chains, and on the other, she strives to choose products which she knows burden the environment as little as possible. In addition to nurturing the environment, Heidi justifies buying foodstuffs that are fairly heavy on the wallet by their health benefits. Heidi and her husband have also seriously considered genetic testing in order to have even more influence on their well-being through their own choices.

Heidi also has some gaps in her environmental awareness. The most notable one is that, without exception, she buys the clothes and shoes the family wears from the most economical sources, mostly from areas with low production costs in Asia, Africa and South America. Transports increase the burden on the environment, but Heidi appeases her guilty conscience by saying that what she does is socially responsible, since it creates jobs in areas where they are badly needed.

Heidi and her husband have three children. They live in an area where most publicly funded schools have a sponsor company, and the curriculum includes a requirement that the pupils work one day per week at the company. From the corporate standpoint, the cooperation is part of their social responsibility activities, which are also supported through taxation. Companies have realised that it does make a difference how they operate in their community. The sponsor companies are convinced that, in the long run, they benefit from investing actively in doing social good, instead of just trying to benefit from the resources provided by society. For the school, the cooperation is at the same time both statutory entrepreneurship education and activity to supplement the school's basic funding.

For environmental reasons and due to time constraints, Heidi strives to minimise travelling. However, it is not always possible. To solve the logistics issues in her life busy with work and family, Heidi relies on a self-propelling car, owned jointly by a group of friends, which takes her either to her destination or, alternatively, to a connecting stop where she can continue her journey in a public smart transport network that consists of different means of transportation. Transport has transformed into mobility as a service. Heidi smiles when she recalls how owning a car was of utmost importance to her father.

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Comprehensive well-being is important to Heidi, and nowadays it is difficult for her to understand how just a little while ago, health was mainly considered to be a means for meeting the demands of working life. Heidi tends to think that work enables a meaningful life, not vice versa. She currently has a personal well-being coach, whom she meets once a month in connection with her monthly hair stylist's appointment and a health check visit at a multiprofessional well-being centre. Heidi believes in the slogan of her well-being coach: the best health investments are made when one is not yet ill.

DREAM:

Migrant Assim, 28

LIFE SITUATION:

- Arrived from Syria a year ago with his brother
- Unemployed, started university studies in Syria
- Interested in business, IT
- Health: traumatic experiences
- Frustrated in his current situation

INTERESTS:

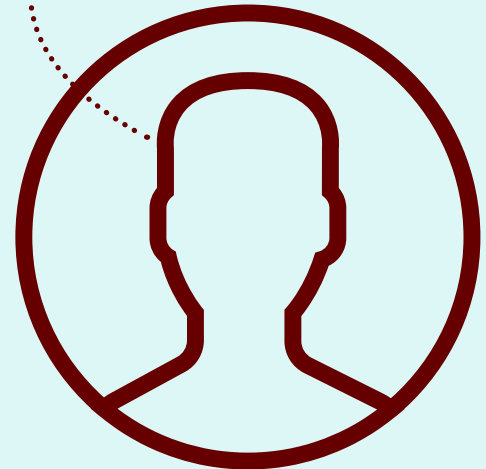
- Business, IT

NEEDS & WISHES:

- Would like to continue his studies and find a job
- He is missing his home country and family members

CHALLENGES & STRUGGLES:

- Inadequate language skills for handling the bureaucracy
- Lack of networks hinders employment and integration
- Hostile attitudes in the society



Assim (age 38, year 2027)

Building networks and assimilating values

Thirty-eight-year-old Assim is from Syria but now lives with his new family in a suburb of a fairly ordinary European metropolis. Assim met his common-law wife through an online dating service. She has two toddlers from her previous marriage. The couple is happy, since they just found out she is four months pregnant.

After moving from Syria, Assim's view of a family was based on a clear division of tasks between women and men. Assim considered housekeeping and child care to be women's tasks, whereas men were the ones working outside the home. Assim's values were put to the test when he met his common-law wife with a Scandinavian set of values and when he became acquainted with the public daycare system in his new home country, in which the employment rate of women is high. At the children's playground outside his apartment complex Assim has also met his neighbours who are stay-at-home fathers, and he has been puzzled over how these men manage with their many children. After thinking things over for a while and participating in events organised in connection with the integration activities, Assim was ready to yield a little in his principles. He appreciates his common-law wife working and nowadays participates in cooking, among other things, at home.

Assim knows English satisfactorily and was fairly quickly accepted into a degree programme, in which he could continue his studies and graduate as an IT engineer. The degree programme based on a social impact bond was implemented in cooperation with a venture capital company, which is part of an international insurance group, and the authorities. Taking an investment risk was worth the company's while, since overall, the degree programme turned

out to be successful. The majority of students who completed the programme were either employed by IT sector companies or established their own business. Although the project incurred expenses, the authorities were also satisfied with the project, since according to estimates, one tax euro invested in the project equals savings of up to three euros in social security costs.

After graduating, finding a job was difficult for Assim. However, he managed to employ himself by establishing a cooperative with his fellow students, which provided them with small customer projects. After the initial difficulties, the cooperative established a clientele. The cooperative provided Assim a flexible form of work, which made him feel useful as a member of society.

Gradually, Assim became a popular invited guest at local events, where the integration of immigrants was discussed. Assim participates in a working group, which plans a "pop up" entrepreneurship model designed for immigrants, in particular. The group's work is still under way, but the initial trials look promising. The pilot has lowered immigrants' threshold

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to become entrepreneurs by means of both tax reliefs and temporary legislation, which allows positive discrimination in public sector procurement. In public procurement, special weight can be placed on a company that has been established by and actively employs immigrants.

Active participation in various networks offered Assim new opportunities. A start-up company project funded through the EU's Horizon4Everyone programme turned out to be particularly useful. As a result of the project, Assim now has a company, which offers digital services to traumatised refugees from areas suffering from war and crises. The company employs Assim and five others, of whom three are immigrants.

Assim has good connections with his relatives in Syria and he follows many traditions he learned as a child. Obligations related to his company take up a major portion of Assim's time, but at the same time, they have expanded his views of European customs. Assim appreciates his family and the opportunities he has received in his new home country. Encouraged by Assim's changed attitude, his common-law wife has also brought up the matter of Assim potentially participating in the care of their first biological child by taking a six-month family leave from his company, with the help of the family leave subsidies paid by society.

Assim is happy with his life and has decided that he will continue building his future in the new home country. At the same time, he is concerned about the increasing number of immigrants who have not found their way to the labour market. Assim has noticed that entrepreneurship has become a new standard, not only to immigrants like him, but to an increasing number of natives. He knows from experience that entrepreneurship is a good option, as long as society ensures that the threshold for becoming an entrepreneur is kept low enough.

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DREAM:

NEET Laura, 19

LIFE SITUATION:

- Lives with her family (mother, step father and little brother) in the countryside
- Graduated from secondary school and started vocational training
- Unemployed
- Health: problems in concentrating and sleeping

INTERESTS:

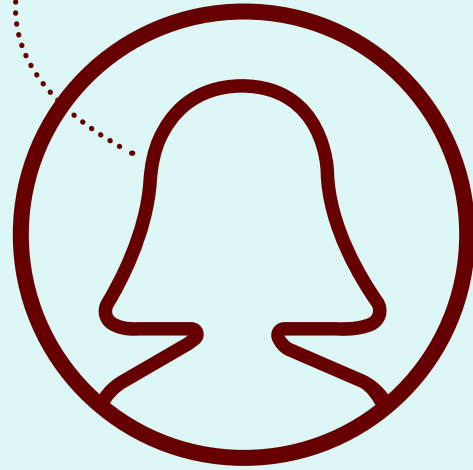
- Fashion, animals

NEEDS & WISHES:

- She wants to find her place in the community and society
- Doesn't know what she wishes for the future

CHALLENGES & STRUGGLES:

- Lack of balance in daily life
- Low selfconfidence
- High unemploymentrate in the area



Laura (age 29, year 2027)

Learning globally, acting locally

Urbanisation has been rapid, and in 2027, more than 65 per cent of the world's population live in cities. In many areas experiencing depopulation, this development has resulted in diminished living conditions. There are also exceptions in this overall development, since not everyone wants to live their entire life in cramped and expensive cities. Twenty-nine-year-old Laura is one of the many people who enjoy the rural peace and quiet more than the hustle and bustle of a city. Together with her husband, Laura has settled in an area where the population development is negative. Laura and her husband operate a pet boarding facility.

She has been happy to notice that she is not the only one who enjoys the countryside, but the environment also attracts pensioners. The main customers of the boarding facility are well-to-do returnee pensioners, whose cats and dogs need short-term care and also increasingly often longer-term boarding services while their owners spend the coldest months of the year in the Mediterranean warmth and sun. The boarding facility is not the couple's only source of income. Laura's husband offers caretaker services to summer house owners and helps the elderly in minor renovations and repairs around the house, as well as works as a courier for packages purchased online.

Laura and her family live in a community-oriented family village established through crowd funding. In the community-oriented village, the principles of the sharing economy are applied to daily meals, and the residents also produce some of their food themselves. In the summertime, the family village offers housing for seasonal labourers, and in the winter, the village facilities house long-term retreats.

The returnee pensioners employ Laura and her husband and the family village offers additional income, but still, these earnings support Laura's family only for a part of the year. Luckily, the long experimented basic income model has been incorporated into the citizens' welfare network. The basic income balances the seasonal fluctuation of the income of Laura's family and provides them an opportunity to live according to their values in the countryside.

When she was younger, Laura had a difficult time deciding what occupational field interested her and what she would like to be when she grew up. Laura fondly remembers a coach at the employment office, with whom she had important

“The basic income balances the seasonal fluctuation of the income of Laura's family and provides them an opportunity to live according to their values in the countryside.”

conversations about her future dreams and drew up a personal well-being plan. Now mastering multiple skills has become a way of surviving for Laura, and being self-employed is natural to her.

There is no school in the town where Laura lives, since the number of children is so small. The lack of a physical school building is not a problem for Laura's children and the other children in the family village, since they are convinced that learning does not depend on location but willingness and motivation. The children's learning motivation is maintained by means of a pan-European virtual school, attended by hundreds of thousands of children and young people in comprehensive school. The virtual school is based on phenomenon-based learning packages, some of which are produced locally and some as international projects.

Laura follows the schooling of her children actively, which has also exposed her to ideas that seem interesting. Currently, Laura is particularly interested in the development of food and cultivation technologies, which she believes will offer her new job opportunities. Laura has already had her ideas pretested at the development project of an international think tank network. The work is still pending, but Laura has received encouraging feedback.

All in all, Laura is fairly happy with the choices she has made, because she does not believe that well-being increases by obtaining more material things but, specifically, by cutting down on them. In the evenings, Laura cannot help but marvel how internationally one can live in the woods. The life of Laura's family is based on local and global networks. The children's school and Laura's own project under development have enabled her to establish solid international contacts, but the countryside is where she feels most at home, and she finds it difficult to understand the life of people living in cities.

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