MEGA-TREND CARDS

MEGATRENDS

KNOW YOUR FUTURE

The trend cards stimulate and broaden your thinking and help you come up with new ideas and envision what the future could look like. All you need is the trend cards, a pen, paper and a couple of friends! More detailed instructions are provided on the instruction card.

sitra.fi/megatrends

Sitra is a future fund that engages in foresight activities, conducts surveys and brings partners together for open-minded experimentation and renewal. Sitra's foresight activities are aimed at achieving a fair and sustainable future, or the next round of well-being.

MEGATRENDS

KNOW YOUR FUTURE

Sitra's trend cards contain various trends that we believe are already influencing our lives and, as a result, our future. Also included are descriptions of the tensions between the trends.

The trend cards cannot be used to predict the future. Instead, using the cards can stimulate and broaden your thinking and help you come up with new ideas and envision what the future could look like. All you need is the trend cards, a pen and paper. Enlisting the help of a couple of colleagues or friends is also a good idea.

HAVE A GREAT TOMORROW!

STUDY. Read through the deck of trend cards and see what thoughts you have about the trends and tensions. Are they familiar to you? Which ones are already apparent? Which ones are surprising?

PRIORITISE. Draw 3-6 cards from the deck at random and place them in the order of priority based on your view. If you are working together with others, discuss and compare the way each of you prioritise the trend cards. Does your discussion highlight any common themes? Do you agree on the priorities?

CREATE A STORY. Draw 3-6 cards and use them to create a story about the future. Incorporate topics that are related to your work or other aspects of your life. Share your story with others.

SOLVE. Choose a tension card from the deck. Think about how the tension could be resolved: is one of the two sides of the tension stronger, could a new direction be found, or will the state of tension continue – and what would that mean?

DREAM. Draw 3-6 trend cards. Based on the cards, create a picture of the best possible future by describing the future of something that is important to you in combination with the cards you drew.

INVENT. Draw 3-6 cards. Based on the ideas you get from the cards, create a future service, solution, product or procedure related to your subjects of interest that would make it better.

BE SURPRISED. Draw 3-6 cards and come up with completely opposite scenarios for them. What would had to have happened for the opposite scenario to become a reality? Can you find surprising perspectives? Share your most interesting and surprising ideas with others. Think about how conceivable the scenario is.

CLIMATE WARMING

Starting from the end of 1800s, the climate has warmed globally by approximately one degree Celsius and in Finland by about two degrees. Warming can be kept to 1.5 degrees globally, but only if a rapid reduction in global greenhouse gas emissions is achieved. At the current rate, the climate will warm by 3 or 4 degrees within this century. This would lead to a climate change feedback loop, resulting in crises such as famine, mass migration, mass extinction of species, coastal flooding and many regions becoming uninhabitable.

INCREASE IN EXTREME WEATHER PHENOMENA

Climate change leads to an increase in extreme weather phenomena. Floods and droughts will become more common, as will increasingly intense storms. The variability of weather conditions will create pressure on agriculture and infrastructure in particular.

DECREASING BIODIVERSITY

We are in the midst of a mass extinction of plants and animals caused by human activity. A million species are under threat of becoming extinct within the next few decades unless the situation rapidly improves by reducing the consumption of natural resources, slowing population growth and expanding protected areas. The deterioration of the state of the environment threatens the well-being of hundreds of millions of people and will also cause annual economic losses measured in hundreds of billions US dollars.

EXCESSIVE CONSUMPTION AND VARIABLE AVAILABILITY OF RESOURCES

Growing consumption means that many resources will become more and more scarce or the cost of acquiring them will increase. Challenges may arise with respect to the availability of critical materials for industry. Sand suitable for construction is also at risk of running out, as is fresh water in many regions. There is a growing need to increase the use of alternative materials as well as the circulation of materials.

SOIL DEGRADATION

At the current rate, 90% of the world's soil will be degraded by 2050 and there is a risk that the world will run out of fertile soil in 60 years. Climate change makes the situation worse by increasing extreme weather conditions. Preventing erosion and sequestering carbon dioxide in soil can increase food security while also mitigating climate change.

INCREASE IN THE AMOUNT OF WASTE

Approximately 0.7 kilograms of waste per person is created around the world each day. In Finland, this figure is 1.4 kilograms. The amount of waste is predicted to increase by 75% globally by 2050. Circular economy solutions can significantly reduce the amount of waste.

TENSION

ENVIRONMENTAL AWARENESS VS ENVIRONMENTAL ACTION

Environmental awareness among people has increased, but its impact is not yet sufficiently reflected in actions. It is possible that a growing number of people will change their habits, but it is also possible that scepticism towards changes in the environment will increase. The tension between awareness and action may also lead to deeper polarisation between those who demand action and those who belittle it. The best way to prevent this polarisation is collective discussion and co-operation aimed at achieving fair and socially acceptable change in society.

TENSION

BELITTLING VS ACTIVISM

Climate marches and movements calling for radical environmental action, such as the global Extinction Rebellion movement, are gathering growing support. This development is paralleled by increasingly loud voices making belittling statements that reject the ability of individual choices – or even Finland's ability as a whole –to solve global problems. Nevertheless, there are more and more signs that activism has led to decisions that are better for the environment, at least as far as target setting goes. It is also possible that the division between belittlers and activists will grow further.

SEEING NATURE AS A RESOURCE VS HAVING INTRINSIC VALUE

Nature is still often seen as a resource that we, as humankind, are free to use as we wish. The opposite view is that we are part of nature, just as the other forms of life on Earth are, and we should act in a way that leaves space for others.

FINLAND VS THE REST OF THE WORLD

In purely quantitative terms, Finland is a small player in regard to climate emissions and other environmental impacts, but our impact per capita is considerable. Sceptics believe that what we do in Finland is of no significance, whereas others emphasise Finland's role as a country that can create solutions and set an example. As wealthy industrial countries generate the majority of the world's emissions, they bear a relatively large amount of responsibility, but they are also in the best position to reduce emissions in a manner that is fair from their citizens' perspective.

A FAIR OR UNEQUAL TRANSITION TO A SUSTAINABLE SOCIETY

Responding to the ecological sustainability crisis requires significant changes to society's structures and practices. How large are the changes that can be achieved, and how fast can they be put into action? How will we ensure that the transition to a sustainable society is equal and fair?

LONGER LIFE EXPECTANCY AND AN AGEING POPULATION

People are living longer and the population structure is ageing. In Western societies, young people will become a minority. Young people cannot be solely responsible for incorporating new approaches, technologies and sustainability into the way they operate. At the same time, one's functional capacity may become a more important factor than one's age. How will our societies look when a growing proportion of the population is over 65 and being a centenarian is normal?

DECLINING BIRTH RATE

The proportion of childless people will increase and the birth rate will decline further in Finland. Childlessness will become common especially among the less educated.

CONCENTRATION OF THE POPULATION IN A SMALL NUMBER OF AREAS

The Finnish population will be concentrated in a few large growth centres. Other regions will face a decline in population and a growing proportion of senior citizens.

CONTINUED URBANISATION

The migration from rural areas to cities will continue globally. In 2050, nearly 70% of the world's population will live in cities. The nature of the megacities that are currently emerging in Asia and Africa will also define our global future. Will they be giant slums of millions of inhabitants or cities with a sustainable infrastructure, administration and way of operating?

GROWTH IN MIGRATION

Global migration flows will grow as a result of the transformation of working life, urbanisation, conflicts and environmental changes. Migration to Finland may also increase.

A STRONGER POSITION FOR GIRLS AND WOMEN

Global progress has been seen in gender equality, but much room for improvement remains, particularly with regard to the structural root causes of inequality, like the distribution of work and power and the manner in which the value of household work and caring for other people is taken into consideration in an economic sense. The position of girls and women has improved and problems are more readily highlighted. In societies with the highest level of equality, social media has, however, created a platform for new kinds of hate speech and hostility towards the position of women and girls.

CHANGING HEALTH CHALLENGES

The ageing of the population will be coupled with an increase in dementia, falls and other age-related health problems. Heatwaves caused by climate change will make it more difficult for people in poor health to cope. Mental health problems will increase, especially among young people, with the underlying causes including climate anxiety, the competitive nature of society and the information flood created by digitisation. Antibiotic resistance will become increasingly common and diseases will spread rapidly in a globalised world.

TRIBALISATION

Polarisation will increase and people will try to assign themselves and others to various imaginary groups based on criteria such as values, place of residence, political opinion, consumption choices or lifestyles. The tribes thus formed are then associated with characteristics that may not be related to the original classification criteria.

DECLINE IN CONCENTRATION AND CREATIVE THINKING

The easy availability of information and intensifying competition for attention has reduced people's ability to concentrate. To cope with the flood of information they face, people draw quick conclusions based on headlines, photos and memes. There is less and less time for boredom and careful thinking.

THE GROWING SIGNIFICANCE OF RELIGIONS AND IDEOLOGIES

The significance of religions is growing globally. This is not evident in Finland on the same scale, although there are some signs of religion being used as an instrument of politics and influence. Alongside the traditional religions, new ideologies such as posthumanism may offer a foundation for action in a changing world.

TENSION

CITIES VS RURAL AREAS VS MULTI-LOCALITY

The population becoming concentrated in a small number of growth centres and the contrasting desire to keep Finland widely populated create a conflict between cities and rural areas. There seems to be an increase in polarisation, although there are also attempts to find shades of grey through multi-locality and more diverse classification.

TENSION

INTERNATIONALISM VS NATIONALISM

Globalisation has made the world more international and agreements on many issues have been reached at the international level. However, globalisation has also led to an opposing reaction in the form of increased nationalism and emphasis on national borders. The benefits of internationalism are not always acknowledged because they may be indirect, and the negative aspects are emphasised in the discussion.

TENSION

INDIVIDUALISM VS COLLECTIVISM

The prevailing individualistic culture is challenged by tribalisation– that is, the formation of new tight-knit groups and growth in movements focused on certain issues – and by the sharing economy and communal living.

NETWORKS VS BUBBLES

Tribalisation and the polarisation of discussion create bubbles of like-minded people. At the same time, social networks and the trust and reciprocity they foster are highlighted from the perspective of well-being as well as working life.

THE DEPENDENCY RATIO VS MAINTAINING THE WELFARE STATE

As the population ages and the size of the workforce declines, there will be increasing tensions between the ideal of the welfare state and how to maintain it. Employment-based immigration, longer careers or healthier lifestyles may ease these tensions, but we may also face a deeper rethinking of the structures of work, income and well-being.

FROM A MULTIPOLAR WORLD TO A POLY-NODAL WORLD

Instead of individual poles of power, the emphasis in global politics is on relationships and interaction. In addition to governments, other players, such as businesses, lobbyists, think tanks, international institutions and cities, play a significant role in this.

THE US RETREATS FROM THE WORLD STAGE

The significance of the US administration in maintaining world order and pointing the way forward is declining, but many US organisations and businesses will continue to play an important role. China's role will grow in significance.

ADMIRATION OF STRONG LEADERS

Democracy is challenged by ideas of practical autocracy and technocracy as well as by the notion that democracy is too slow or ineffective to respond to the urgent questions of our time. The need for rapid, major changes and a yearning for simple solutions have made strong leaders more popular, presenting a challenge to individual freedom and democracy.

THE RISE OF NEW MOVEMENTS

Dissatisfaction with the current measures taken with respect to climate change and biodiversity, among other things, has motivated a growing number of people to voice their opinions and participate in demonstrations. Similarly, actions that are perceived as unfair and promoting inequality are forcing people out onto the streets. Social media provides a platform for the rapid formation of movements focused around certain issues.

CONFUSION IS POWER

The amount of disinformation is growing and efforts to influence opinions are increasingly geared towards instigating confusion and discord. This increases the perception of the world being complex and a desire for simple solutions.

THE RISE OF POPULISM

Weakened future prospects, the fragmentation of the political map and the polarising effect of social media have led to a rise in populism, which emphasises the division between the elites and the masses.

TENSION

CENTRALISED DECISIONS VS BROAD ENGAGEMENT

The ecological sustainability crisis and many other trends call for quick and significant action. However, at the same time, it is necessary to increase engagement and collective discussion and understanding as well as prevent the polarisation of views. Otherwise, the necessary action cannot be taken. The key is to reduce confusion and to create visions of desirable futures.

TENSION

FREEDOM OF SPEECH VS INFLUENCE THROUGH INFORMATION

Stronger intervention is needed against online influence exercised through information, hate speech and defamation but, at the same time, there is a need to foster responsible freedom of speech.

TENSION

GLOBAL INSTITUTIONS VS POLY-NODAL WORLD

Global institutions are based on nation states and, in part, the concept of great powers. The poly-nodal world and its wide range of actors challenges this model. Then again, global institutions are what we often look towards when we need to find solutions to wicked problems. How can global decision-making be restructured so that other actors, such as businesses, cities and non-profit organisations, are better engaged while strengthening the global institutions?

TECHNOLOGY TRANSFORMS OPERATING METHODS

Technology is developing rapidly, changing production methods and operating models. More and more things can be automated, production and operations can be decentralised and interaction can take place remotely or via a virtual environment. Making use of technology increasingly calls for changes in thinking models and operating methods.

AI APPLICATIONS PERMEATE SOCIETY

Self-driving cars, voice-controlled machines, personalised recommendations and other AI applications are becoming increasingly commonplace. More and more decision-making power is assigned to algorithms, underscoring questions of transparency, liability and distortions in the data used.

THE NEXT WAVE OF DIGITISATION

Digitisation, or the use of digital technology in services and human interaction, is already part of daily life. In the short term, the interesting future trends in this area include virtual reality, augmented reality, voice control, gesture control, the Internet of Things or the Internet of Everything, as well as an emphasis on energy efficiency. Also of interest in the longer term are blockchain-driven services and the emergence of quantum computing.

THE GROWTH OF HEALTH TECHNOLOGY

Portable devices to monitor health have become increasingly common and they are still being developed further. Increased data enables more personalised and preventive care. At the same time, new treatments are being developed based on genome editing and modifying the microbiome, for example.

GROWING USE OF PROGRAMMED ORGANISMS IN PRODUCTION

Genetic engineering and synthetic biology enable the creation of new kinds of organisms as well as the modification of existing organisms for specific purposes. Genetically modified yeast can generate silk and cyanobacteria can produce biofuel. Similar applications can be used in food production, chemical processes, textiles and in the pharmaceutical and construction industries, for instance.

THE FALLING COST OF RENEWABLE ENERGY

The price of solar and wind energy has fallen sharply. At the same time, rapid progress has been made in the battery technology required for renewable energy storage. In some places, renewable energy is already cheaper than energy produced from fossil fuels. Energy production will also become increasingly decentralised as more and more people produce their own energy and sell what they do not need.

GREATER EMPHASIS ON THE IMPORTANCE OF UNDERSTANDING TECHNOLOGY

With more and more activities moving online to digital platforms, it will be important for individuals as well as nation states to acquire new technological competences. These can include, for example, issues related to data use and rights over data, understanding the impact of algorithms on behaviour, topics related to decision-making or being prepared for cybercrime.

TENSION

CORPORATIONS VS GOVERNMENTS DECIDING ON TECHNOLOGY

The adoption of technology changes technology in significant ways, which is why it is important to pay attention to who decides on its development: corporations, governments or people, or perhaps all of them together? In addition to addressing individual technologies, consideration should also be given to the ecosystems they form and their combined effects.

TENSION

CO-OPERATION VS BATTLE OVER AI

We are in the midst of a competition between corporations and governments as to who will reap the greatest benefits from the growing amount of data and the development of artificial intelligence in the form of patents, infrastructure or the ability to define operating practices, for example. Digital technology is becoming tightly intertwined with geopolitics.

TECHNOLOGY AS AN OPPORTUNITY VS THREAT

While technology can be an asset in the transition to a more sustainable society, it can also be an obstacle. In particular, the growing energy demands of technology conflict with attaining climate targets. Dependence on technology may also have an adverse impact on well-being.

WIDESPREAD USE OF TECHNOLOGY VS INEQUALITY

With the rapid development of technology and longer lifespans, there will be a growing number of divergent technological realities in society. Different age groups use technology in very contrasting ways. There is no longer a solution that suits everyone.

THE CONCENTRATION OF WEALTH

The wealth generated by economic growth is not distributed in a sustainable manner. It is becoming concentrated in the hands of a shrinking minority. Inequality, with its many dimensions, is a key future challenge globally and in Finland.

THE FOCUS OF ECONOMIC GROWTH WILL SHIFT AWAY FROM THE WEST

The global economy will grow, but rates of growth will be low in Western countries. The ageing population and the limits of our planet's ecological carrying capacity place tighter boundaries on economic growth than in the past. At the same time, statistical indicators of well-being and genuine development will take on a more important role.

EMPHASIS ON THE CONTINUOUS DEVELOPMENT OF COMPETENCE

Our changing working life and society require lifelong learning and the continuous development of competence. Skills, learning new things, creativity and seeing the big picture will increase in significance. The structures and practices of competence development will be subject to growing pressure for change.

THE CHANGING STRUCTURES OF WORK

The platform economy and new organisational models challenge the traditional relationship between the employer and the employee. Work can be organised – and its benefits shared – in many different ways. The traditional classification of people into those who are unemployed, those who are wage-earners and those who are entrepreneurs may no longer apply in the future if the number of pensioner freelancers, project nomads and people in various intermediate states grows.

THE GROWING SIGNIFICANCE OF THE CIRCULAR ECONOMY

The circular economy is an economic model in which production and consumption are planned in a way that prevents waste from being generated. Instead, materials and their value remain in circulation. The circular economy is not only about recycling but also about new economic operating models, such as sharing, leasing, repair and reuse. New technology plays a key role in enabling these models.

TENSION

SUSTAINABLE VS RESTORATIVE ECONOMY

There is growing agreement about the need to reform economic structures and paradigms, but views vary about the scope of these reforms. Should the focus be on sustainability and the prevention of adverse impacts, or should improving the state of the environment be taken as the objective and social well-being as a boundary condition? What is the perception of the role of the economy?

CONCENTRATION VS FAIR DISTRIBUTION OF WEALTH

While income differences have not changed much, differences in wealth have grown, as has the degree of perceived inequality. As the middle class shrinks, the division between the wealthy and the poor becomes sharper. The fair distribution of wealth and ensuring people's livelihood are key questions for the future.

PLATFORM MONOPOLIES VS HUMAN-DRIVEN DATA ECONOMY

Digitisation has accelerated the concentration of wealth in the hands of a few and led to the creation of platform monopolies. The counterforces include platform co-operatives, the peer-to-peer economy and sharing economy models and the progress of a human-driven fair data economy. What will be the direction of development of the data economy in Finland and around the world?

CONSUMPTION CULTURE VS ENOUGH IS ENOUGH

Consumption continues to grow in spite of increasing environmental awareness. In the future, we may see consumption take a downward turn or become more focused on services. Consumption habits may also divide the population.

TRANSFORMATION OF WORK VS ENSURING PEOPLE'S LIVELIHOOD

Technological progress and the transition to a sustainable society will significantly change industries while also creating new kinds of jobs. The uncertainty of working life will increase and it is unclear how work and income will be generated and distributed in the future. The consideration of wealth distribution and income in the future should be an integral aspect of foresight activities in politics.