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Government Report on the Future, Part 2

# SOLUTIONS TO THE TRANSFORMATION OF WORK



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# Government Report on the Future, Part 2

Solutions to the Transformation of Work

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<p><b>Abstract</b></p> <p>This is the second part of the Report on the Future by Prime Minister Juha Sipilä's Government. The two-part Report on the Future serves as an opener for discussions for the coming years.</p> <p>The rationale underlying reports on the future is to identify and highlight issues that are important for decision making and will require attention in the future. The aim of this second part of the Report on the Future is to identify desirable futures, decision-making needs and societal issues related to work. These issues and their alternative solutions will also be considered and resolved by future governments. The report is part of a long-term decision-making process, where the debate on the future and transformation of work continues. The goal is that solutions to this phenomenon affecting the whole of society can be implemented over a long time span exceeding the electoral term.</p> <p>The main observations of this publication crystallise as follows: the forms of working and employment relationships will become more varied, which will require changes, for instance, in legislation and social security. Work will be less anchored to certain times and locations, but the change is not equally strong or synchronous in all sectors. Education highlights continuous learning, and Finland needs a high-quality model for lifelong learning for all population groups. Flexibility is increasing on the labour market and in working life, and issues pertaining to income are emphasised. Social dialogue is needed on the different and changing instrumental values of work, in addition to economic values. Responsibility for launching this dialogue rests with decision-makers.</p>			
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<b>Tiivistelmä</b>	<p>Tämä on pääministeri Juha Sipilän hallituksen tulevaisuusselonteon 2. osa. Kaksiosainen tulevaisuusselonteko on keskustelunavaus tuleville vuosille.</p> <p>Tulevaisuusselontekojen tehtävä on tunnistaa ja nostaa esiin päätöksenteon kannalta tärkeitä tulevaisuudessa huomiota vaativia asioita. Tämän tulevaisuusselonteon toisen osan tavoitteena on tunnistaa työhön liittyviä toivottavia tulevaisuuksia, päätöksentekotarpeita sekä yhteiskunnallisia kysymyksiä. Nämä kysymykset ja niiden ratkaisuvaihtoehdot ovat myös tulevien hallitusten pohdittavana ja ratkaistavana. Selonteko on osa pitkän aikavälin päätöksentekoa, jossa keskustelu työn tulevaisuudesta ja murroksesta jatkuu. Tavoitteena on, että koko yhteiskuntaan vaikuttavan ilmiön ratkaisuja voidaan toteuttaa pitkällä aikajänteellä yli vaalikausien.</p> <p>Julkaisun keskeiset havainnot kiteytyvät seuraavasti: työn tekemisen muodot ja työsuhteet moninaistuvat, mikä edellyttää muutoksia esimerkiksi lainsäädännössä ja sosiaaliturvassa. Työn aika- ja paikkasidonnaisuus heikkenee, mutta muutos ei ole yhtä voimakas tai samatahtinen kaikilla aloilla. Koulutuksessa korostuu jatkuva oppiminen ja tarvitsemme Suomeen kaikki väestöryhmät kattavan, laadukkaan elinikäisen oppimisen mallin. Työmarkkinoiden ja työelämän joustavuus lisääntyy ja toimeentuloon liittyvät kysymykset korostuvat. Yhteiskunnallista keskustelua tarvitaan työn erilaisista ja muuttuvista välinearvoista taloudellisten arvojen lisäksi. Tämän keskustelun virittämisestä vastuu on päätöksentekijöillä.</p>		
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<b>Referat</b>	<p>Detta är andra delen av statsminister Juha Sipiläs regerings framtidsredogörelse. Framtidsredogörelsen i två delar inleder diskussionen inför kommande år.</p> <p>Framtidsredogörelsens syfte är att identifiera och lyfta fram frågor som är viktiga för beslutsfattande och som kräver uppmärksamhet i framtiden. Målet med denna andra del av framtidsredogörelsen är att identifiera önskade framtider, behov av att fatta beslut och samhällseliga frågor med koppling till arbete. Dessa frågor och lösningsalternativen kommer kommande regeringar att fundera på och avgöra. Redogörelsen utgör en del av beslutsfattande på lång sikt, där diskussionen om arbetets framtid och förändring fortsätter. Målet är att lösningar för ett fenomen som påverkar hela samhället kan genomföras systematiskt och långsiktigt över valperioderna.</p> <p>De viktigaste observationerna i publikationerna kan sammanfattas på följande sätt: vi får fler sätt att arbeta och fler anställningsformer, vilket förutsätter förändringar i t.ex. lagstiftning och socialskydd. Arbetets bundenhet till tid och plats försvagas, men förändringen är inte lika kraftig och går inte i samma takt inom alla branscher. I utbildningen betonas ständigt lärande och vi behöver en modell för livslångt lärande som har hög kvalitet och omfattar hela Finlands befolkning. Flexibiliteten på arbetsmarknaden och i arbetslivet ökar och frågor gällande utkomst betonas. Det behövs samhällselig diskussion om arbetets olika och föränderliga instrumentella värden utöver de ekonomiska värdena.</p>		
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## Discussion opener for finding solutions to challenges posed by the transformation of work

The rationale underlying reports on the future is to identify and highlight issues that are important for decision making and will require attention in the future. The aim of the second part of the Government's Report on the Future is to identify desirable futures, decision-making needs and societal issues related to work. In the main, these issues and their solutions will be considered and resolved by future governments. This report is part of long-term decision making and preparation, where debate on the future and transformation of work will continue. *The goal is that solutions to this phenomenon affecting the whole of society can be implemented over a long time span transcending electoral terms.*

The main observations of the two-part Report on the Future crystallise as follows: work and employment relationships will take on varied forms, which will require changes, for instance, in legislation and social security. Work will be less anchored to certain times and locations, but the change is not equally strong or synchronous in all sectors. Coordination between work and private life is a major societal issue that affects a large share of Finns in various ways. Getting a better grip on this issue can also increase the meaningfulness of work. Education highlights continuous learning, and Finland needs a high-quality model for lifelong learning for the entire population. The labour market and working life will become increasingly flexible, and issues associated with income are highlighted. The transformation of work is also a global issue with migration and labour immigration at the core. Social dialogue is needed on the different and changing instrumental values of work, in addition to economic values, so that we do not promote conflicting goals. Responsibility for initiating this dialogue rests with decision-makers.

The change in work creates tensions with respect to the organisation and contents of work, the required skills, income, and the meaning of work. It is possible to resolve these tensions by discussing together what kind of futures of work we want to pursue, and by taking long-term policy actions to achieve them. The Report on the Future is one opener for discussion for Finnish decision-makers.

Prime Minister Juha Sipilä

Helsinki, October 2018



# 1 Introduction

The theme of the Report on the Future issued by Prime Minister Juha Sipilä's Government is the future of work. Preparation of the report began in March 2016, and the work was completed in two parts, in 2017 and 2018.

The first part of the Report on the Future was published in June 2017<sup>1</sup>; it examined how work is changing. Researchers have conducted two analyses to serve as background for the two-part report<sup>2</sup>. Apart from these analyses, in 2016–2018 the topic was discussed in over 50 different workshops, seminars and discussions exploring the future of work and at over 30 meetings with experts. This second part of the report is based, above all, on the latter analysis conducted by researchers in 2018<sup>3</sup>. It provides a more extensive background analysis for those who wish to know more. Parliament's thorough report on the first part supplemented the work and spurred it on<sup>4</sup>.

The report was prepared in the Prime Minister's Office utilising the national foresight approach, which is based on the use of continuous and systemic foresight in decision making. The aim is to shift the Government's foresight efforts towards a model where foresight and future-oriented thinking are part of civil servants' and decision-makers' daily work. Cross-generational thinking, extending far into the future, is also an essential element of the 2030 Agenda for Sustainable Development<sup>5</sup>.

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<sup>1</sup> Government Report on the Future, Part 1: A shared understanding of the transformation of work. 8.6.2017. <http://julkaisut.valtioneuvosto.fi/handle/10024/80036>

<sup>2</sup> Dufva, M., Halonen, M., Kari, M., Koivisto, T., Koivisto, R. & Myllyoja, J. 2017. Toward a shared understanding of the future of work. Publications of the Government's analysis, assessment and research activities 33/2017.

<http://tietokayttoon.fi/julkaisu?pubid=18301>

Koponen Johannes, Anttila Johannes, Eranti Veikko, Jousilahti Julia, Koskinen Minea, Leppänen Juha, Neuvonen Aleks, Dufva Mikko, Halonen Minna, Myllyoja Jouko, Pulkka Ville-Veikko, Annala Mikko, Hiilamo Heikki, Honkatukia Juha, Järvensivu Anu, Kari Mika, Kuosmanen Jaakko, Malho Maria & Malkamäki Maarit. 2018. Long-term Policymaking as a Tool through Transformation – Aspirations for the Future of Work. Publications of the Government's analysis, assessment and research activities 34/2018. <http://tietokayttoon.fi/julkaisu?pubid=25901>

<sup>3</sup> See above.

<sup>4</sup> Committee for the Future. 2018. Committee Report TuVM22017 vp - 6/2017 vp. Government Report on the Future, Part 1: A shared understanding of the transformation of work.

[https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM\\_2+2017.aspx](https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM_2+2017.aspx)

<sup>5</sup> Government Report on the 2030 Agenda for Sustainable Development. 2.2.2017.

The rationale underlying reports on the future is to identify issues that will require attention transcending government terms. This report highlights recognised factors and development paths that will help us to meet changes in work in Finland.

The report presents five key visions for the future of work, which have emerged through research, experts' views and open discussions. An important task of the report is to clarify the socio-political issues that relate to these visions and focus on the contents and practices of work, the relationship between the employer and the employee, income, skills, and attachment to society. The visions presented and the related solutions have been built devised in accordance with the principles of sustainable development<sup>6</sup>; sustainable working life requires, among other things, that future work does not endanger health or nature's carrying capacity. From the point of view of human and social sustainability, the vital issue is to participate in working life and to secure income (see Appendix 2). The visions and measures presented also include replies to Parliament's report<sup>7</sup> on the first part of the report, while continuing the dialogue on the future between the Government and Parliament.

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<sup>6</sup> Sustainable development indicators relating to work.

<http://kestavakehitys.fi/seuranta/tyoelama-laatu-ja-muutos>, 11.4.2018.

<sup>7</sup> Committee for the Future. 2018. Committee Report TuVM22017 vp - 6/2017 vp. Government Report on the Future, Part 1: A shared understanding of the transformation of work.

[https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM\\_2+2017.aspx](https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM_2+2017.aspx)

## 2 Major changes, numerous decision-making needs

This chapter raises topics and questions related to five change processes of work, to which it would be important to find answers and solutions in the near future.



Figure 1. Changes of work

The transformation of work must be managed wisely and over a long term in order to achieve a better working life and prosperity. If the change is managed poorly, there will be wider differences in skills, an increase in inequality, and more extensive societal polarisation. The change is not automatically positive.

The views concerning changes in the **structures and organisation of work** emphasise the platform economy<sup>8</sup> and gig work, as well as the transformation of the employer-employee relationship. These phenomena are still small-scale, but increasingly better known, and they are expected to become more common in the

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<sup>8</sup> In the platform economy, people, corporations, enterprises and other organisations sell, transmit and consume, for instance, services and know-how on digital platforms. The platform economy is characterised by low fixed investments, low unit and transaction costs, and business models based on algorithms and data (Ailisto et al. 2016). The terms and their development have been discussed extensively, see Ailisto, H. (ed.), Collin, J. (ed.), Juhanko, J. (ed.), Mäntylä, M. (ed.), Ruutu, S. (ed.), Seppälä, T. (ed.), Halén, M., Hiekkanen, K., Hyytinen, K., Kiuru, E., Korhonen, H., Kääriäinen, J., Parviainen, P. and Talvitie, J. 2016. Onko Suomi jäämässä alustatalouden junasta? Publications of the Government's analysis, assessment and research activities 19/2016. <https://tietokayttoon.fi/julkaisu?pubid=11201>

future<sup>9</sup>. A central tension factor is the increasing one-sidedness of work due to standardised services and, conversely, swifter brokering and acceptance of work. Working life is expected to become more personalised and freer, but also more demanding for the individual. Potential measures include support for self-direction, the adjustment and updating of social security with respect to new work forms, and the regulation or support of various types of work in the platform economy. Another critical challenge in the developing platform economy is the acquisition of information; tracking the movements of information and money on the platforms, for instance for levying taxes, is difficult<sup>10</sup>. As work-related freedom increases, trust will take on more importance.

Questions relating to changes in the structures of work, regarding which our society should make decisions in the near future:

- Relationship between paid work, entrepreneurship and platform work
- Regulatory solutions and the utilisation of new technologies and platforms in cooperation between the public authorities and the social partners
- The public sector as a platform and as a user of platforms

For the **contents and practices of work**, it is known that technological transformation reduces the need for human work, especially in routine tasks. However, people's valuations are not static, and the demand for and appreciation of many occupations conceived as traditional (e.g. handicrafts) may increase. In many sectors, work will be less anchored to certain times and locations, but the change will not be synchronous in all sectors and decision-makers must take this variety into account. Employees will have more freedom and responsibility for managing their own work, but not everyone has the preparedness to do so. The individual's responsibility for his or her own work, learning and career is increasing, and regardless of the sector, everyone should get support for self-management and skills development. The transformation of work requires changes in legislation, support for mobility and further discussion, for example, on the possibilities of company-level agreements. Particular attention should be paid to the prevention of disparities and the elimination of segregation (e.g. the gendered labour market) when defining the outlines for the future of work.

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<sup>9</sup> For example, the number of part-time workers is rising steadily. In 2017, they accounted for 17% of all employed people. <https://tilastokeskus.fi/til/tyti/index.html>

<sup>10</sup> Press release of the Tax Administration, 9.8.2018, Alustatalous luoo haasteita verokertymälle, <https://www.vero.fi/tietoa-verohallinnosta/media/lehdist%C3%B6tiedotteet/2018/Alustatalous-luo-haasteita-verokertymalle/>

Questions relating to changes in the contents of work, on which our society must make decisions in the near future:

- Development of working life so that both hi-tech occupations emphasising technology and hi-touch occupations emphasising interaction are taken into account
- Control of the work load, support and management brought by self-direction
- Definition of cooperation between man and machine and the impact of the dissipation of occupational boundaries

**Skills** almost always take centre stage when talking about the change of work. However, conversion of people's skills is always relatively slow, and changes, for example, in demand for work are rapid. In order to ensure sufficient skills in the future as well, two things are needed: the teaching of metaskills at all levels of education; and the provision of lifelong learning to as many people as possible. In the future, the accumulation and learning of skills must also be seen firmly as an issue for communities and enterprises: the possibly shorter education periods emphasise learning during one's career. In learning skills, more attention must also be paid to environments outside educational institutions and free time.

Questions relating to skills, on which our society must make decisions in the near future:

- Preventing the increase of inequality in skills
- Focusing on metaskills<sup>11</sup> and passion for learning in basic and secondary education
- Wide-range actions to promote lifelong learning
- Continuous development of employees' skills
- Intensive focused training to support the learning of new skills

**Income** will change to allow more flexibility in the labour market and, generally, in working life. This will support the autonomy of individuals and will enable the accumulation of income from varied sources, but will also create uncertainty about earning one's livelihood. Possible measures in the transformation of income include the elimination of bureaucracy traps by harmonising concepts, the development of services, support models based on real-time income accounting, and development of the entire administrative system in a direction that allows a more flexible transition between various categories (unemployed, student, employed, pensioner) or makes

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<sup>11</sup> Skills promoting learning and other working, e.g. cooperation, thinking and life management skills.

such categories unnecessary. The issues of income are explored broadly in the TOIMI project on the overhaul of basic security and activity. The project is preparing a comprehensive reform of the social security system together with parliamentary actors<sup>12</sup>.

Questions relating to the change of income, on which our society must make decisions in the near future:

- Preventing the polarisation of income distribution
- Better consideration of individuals' multiple situations in social policy
- A basic model of social security that supports the individual's autonomy and protects against risks even in a changing future
- Raising the employment rate

The change in the **meaning of work** is central to society's value systems. Paid work and measures to increase it have been at the core of industrial society for more than a hundred years. At the same time, thanks to factors such as technological advances, it is possible for us to set a social goal where all work based on routine tasks is automated. This objective challenges us to evaluate the social significance of work in new ways. Key questions are how to implement a coherent social policy that supports a good and valuable life between these partly contradictory goals, and how to measure and value the quantity and quality of free time in these changing circumstances.

The question relating to the change in the social meaning of work, on which our society must make decisions in the near future:

- From emphasising work to emphasising valuable doing

In addition to these five changes, there are many other issues related to the transformation of work. Not all of them are covered by this report.

One major theme, which is both underlying the transformation of work and included in the alternative solutions, is **demographic change and migration**. In the future, Finland's population will only grow through immigration. In addition, the average age of the population will rise and the working-age population in Finland will be reduced by 75,000 by the year 2030. There is the ability and the will to secure the availability of the labour force in various sectors through immigration<sup>13</sup>. The Government promotes

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<sup>12</sup> TOIMI project, <https://vnk.fi/toimi>

<sup>13</sup> Ministry of the Interior 2018. Finland to be the safest country in the world. Futures Review of the Ministry of the Interior. Government Publication Series 12/2018.

the immigration of skilled labour<sup>14</sup>, and in the future, immigration will diversify and increase in many ways.

In order to reduce the sustainability gap, a marked **increase in the employment rate** is sought in Finland. If the target were set at 78%, the number of people employed should increase by about 200,000 from the present level. This would require not only a very rapid fall in unemployment figures, especially those for structural unemployment and long-term unemployment, and a marked population shift from outside the labour force into the labour force, but also sufficient immigration of skilled labour from abroad. The magnitude of the need for labour immigration varies in the scenarios drawn up by the Ministry of Economic Affairs and Employment using Statistics Finland's data. The figure is around a couple of tens of thousands, depending on how much unemployment is calculated to decline and how much movement there would be from outside the labour force into the labour force.

Increasing immigrants' share of the Finnish labour force also has multiplier effects on the labour market. Immigrants diversify Finnish working life and provide businesses and other actors with the opportunity to utilise the skills and international networks of immigrants as a resource in the competition for experts and as a backdrop for innovations and attracting investments. In the future, Finland will compete for experts increasingly intensely on the global market. At the same time, the threshold for Finnish experts to move abroad will be lower. The importance of a national long-term vision, a strategic outlook and a desired state for attracting and retaining skilled people will gain a pivotal role in the future. The phenomena of the transformation of work discussed in this report affect all people living and staying in Finland; for example, the importance of successful integration services and measures is emphasised even more during transformation. We need bold proposals and new means to achieve integration encompassing the whole of society.

**Work and strengthening growth** have formed the backbone of our social policy. Economic growth requires labour force and often also an increasing number of working hours, whereas job creation requires investments that accelerate economic growth. Finland's success in global competition requires constant renewal and the development and introduction of all kinds of innovations, including the new structures of value creation and the prerequisites for success in them, i.e. new types of global ecosystems. With regard to new technologies, the importance of innovations complementing human work should be emphasised. Economic growth and work have also had a strong link with welfare through, among others, income and services provided by society. Preconditions for economic growth and the functioning of the

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<sup>14</sup> Ministry of Economic Affairs and Employment 2018. Labour immigration, <https://tem.fi/tyoperusteinen-maahanmuutto>

labour market have been advanced, for example, by adjusting the taxation of work, by investing in education and enterprises and by developing labour legislation. Parties, political groups and interest organisations participate closely in the varied aspects of labour market policy. The future challenges us to seek increasingly manifold and extensive solutions in all segments of labour and the economy, and to conduct a critical debate on the traditional links between work, growth and welfare.

## 2.1 Transformation of work requires long-term policy making

Complex long-term change phenomena, such as changes in work, are not easily converted into short-term policy actions. Slowly advancing or complex phenomena may be overshadowed by responses to rapid changes in the operating environment. The main reason for this is that the time horizon of politics is often at most one electoral term.

***It is possible that the ongoing transformation of work will require the construction of new institutions that can be as important as the institutions, from representative democracy to social security, created by the Industrial Revolution.***

However, new institutions do not arise out of nothing but gradually, one solution at a time, spreading to the new context. That is why even old institutions must seize technological opportunities. The Report on the Future strives to support the finding of solutions important for the future by highlighting topics that need decisions for steering the transformation of work to the desired direction. It is important to jointly outline what we really want from work, and more broadly, from a well-functioning and fair society.



### 3 Vision for the future of work and proposals for decisions

This chapter includes recommendations for action. The aim is to bring up thought-provoking proposals for the identified long-term decision-making needs.

The recommendations for action aimed at the future are not lucid and clear. Themes on which decisions should be made have been identified while preparing the report, but it is difficult to raise, in particular, wide-range and concrete proposals. The proposals for action spotlight the role of general government finances in the platform economy, better coordination of benefits and services, the elimination of bureaucracy traps and, further, the various models of basic income and negative income tax, and their elements as part of social security, while taking into account the associated major needs for change and risks<sup>15</sup>. Other important proposals include continuous learning and retraining in working life, as well as the themes of meaningfulness and self-direction.

The lack of strong, new proposals for action is by no means a wonder. During the transformation, old, well-served policy measures and institutions will lose their power. Some of them can be redirected, thereby improving their effectiveness. However, it is likely that the old operating models need to be accompanied by complementary solutions originating in the needs and opportunities of the new era. Most of these solutions are still at the stage of ideas or very narrow implementation.

A good historical example of the difficulty of identifying the scalability potential of new solutions is the development of maternity and child health clinics. When the first experiments with maternity and child health clinic services were made in Finland in the 1920s, it must have been difficult to foresee that the clinics would eventually become a yardstick for defining the whole set of health services meant for families with children. Nor did Finland in the 1920s have wide-ranging perspectives<sup>16</sup> as to how maternity and child health care services would spread to the whole country: the level of infrastructure development, the number of trained public health nurses, the demographic structure and the level of organisation of municipalities as providers of services set tangible barriers, which had largely been dismantled by the time when, in

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<sup>15</sup> In its country report published in spring 2018, the OECD did not recommend basic income for Finland, <http://www.oecd.org/economy/economic-survey-finland.htm>

<sup>16</sup> With the exception of Arvo Ylppö, see e.g. *Duodecim* 1922; 38 (issue 5): 183 - 190.

1949, maternity and child health care clinics became a statutory service operated by all municipalities.

We are possibly in the same situation now with many of the key solutions to work and working life: we cannot fully grasp how new social innovations can be made to spread or how wide their effectiveness in the end will be. We know that change phenomena shape policies, markets, institutions and ways of organisation, and that many of the new solutions will emerge from today's margins and experiments. We can now identify the most promising of them and steer the change of work by naming desirable futures, by making systematic experiments and by removing barriers that prevent the spreading of new solutions.

### 3.1 Vision for the future of work

Many of the proposals for action in the transformation of work are either rather narrowly applied social innovations or suggestions for redirecting existing institutions, partly using new technological opportunities. A good example of the former is the career account aimed at updating skills and intended for people who already have a longer work history. An example of the latter is the direction of schools and educational institutions in a new way to serve the adaptation of working people's skills for the needs of the rapidly changing operating environment.

It is worth recalling that many work-related policy instruments are relatively slow to have impact: the fruits of new education programmes typically will be seen on the labour market only 5–10 years later; the behavioural effects of many incentives will be apparent in about 4–5 years; the implementation of large public investments often takes at least five years. Naturally it takes even longer for economic benefits to appear.

For many changes in the current operating environment, five years is a long time because many things will have changed before the desired results are seen properly. Therefore, a vision has been defined to serve as background for the proposals made in the Report on the Future: it represents the desirable development curve, not just one decision or measure.

A vision divided into five themes:

# VISION FOR THE FUTURE OF WORK

**Structures of work**  
Self-employed people, agency workers and platform/gig workers have experience of the same kind of fair and comprehensive social security and social protection as employees have. Regardless of the form of employment, people's ability to work and function is looked after.

**Contents of work**  
Artificial intelligence and robotics create new kinds of preconditions for complementing people's skills. At the same time, people find opportunities for more diversified utilisation of their skills.  
Society's objective is to ensure that new technological opportunities are realised as equally as possible for everyone. This also emphasises the global responsibility of working life in line with sustainable development; the realisation of opportunities should be examined across national boundaries.

**Income**  
Everyone has the opportunity, simultaneously, to acquire sufficient income, to develop and to perceive oneself as a significant component of society.  
In accordance with the objectives of sustainable development, social disparities between the various groups are evened out.

**Skills**  
A comprehensive and high-quality system or platform for lifelong learning, encompassing all population groups, is created in Finland. This is known internationally as a success story comparable to the Finnish comprehensive school.

**Meaning of work**  
Work is valued through its varied production of social value, not only by assessing the rise in its economic value.

The following subsection proposes measures that help to reach the vision and steer the transformation of work sustainably in the direction desired. The sustainable development indicators relating to work and wellbeing<sup>17</sup> (e.g. the global responsibility of working life, employment rate, good working life, ability to work, women's average earnings compared to those of men, income differences, young people not in education, employment or training, share of people who have completed a post-comprehensive level qualification, etc.) support the implementation of the vision. The risk of inequality of future work and skills, and how to respond to this risk, are the core issues.

Nor is the vision without tension. When new approaches encounter old institutions, tensions arise. Figure 2 illustrates some of the main tensions and the possibilities for resolving them. For its part, long-term decision making (Chapter 3.3) seeks to reduce tensions.

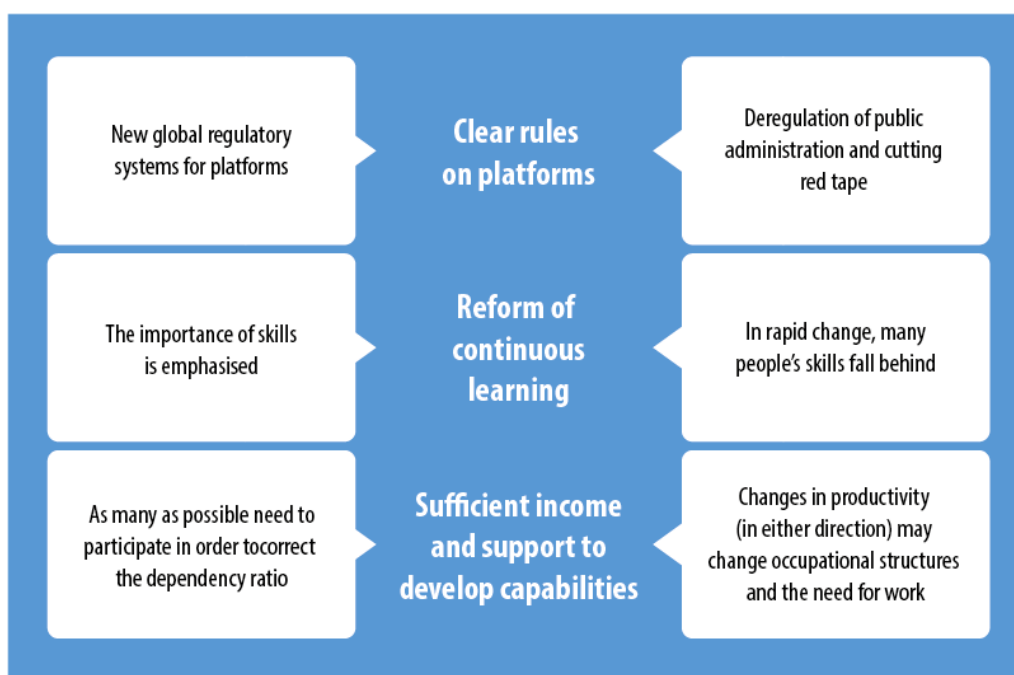


Figure 2. Tensions in the transformation of work

<sup>17</sup> Monitoring of sustainable development, <http://kestavakehitys.fi/seuranta>, 7.6.2018.

## 3.2 Measures leading to a sustainable direction

### 3.2.1 Structures of work

In many ways, traditional paid work has a different role when compared against other forms of work. For example, being an entrepreneur has been seen more as people's own choice giving more freedom than paid work, as well as opportunities for greater economic benefits than paid employment.

Various global platform economy solutions, such as gig work offered through applications or a network platform (AirBnB, Uber etc.), are very likely to become more common in the future. They allow a new, more efficient way of getting organised than traditional organisation based on the continuous use of labour and expertise (paid employment). The most successful companies and public organisations acquire more and more know-how and resources from platforms.

So far, most Finns work in traditional employment relationships. In the future, increasingly more people can alternate between spells of work organised in different ways. Becoming a self-employed person or a freelancer is not necessarily an obvious deliberate choice for the individual. It is therefore important to create a framework that enables people to become an entrepreneur or a platform worker without losing all of the employee's benefits. Platform work also involves the risk that the company shifts some of the traditional employer's costs and responsibilities to the employee<sup>18</sup>. Thus, the development of platform work affects the distribution of costs incurred by production inputs. Whereas in a traditional employment relationship the employer is responsible for the cost of the facilities, tools (e.g. vehicles, IT) and materials needed for the work, in the platform economy or in some other entrepreneur-like relationship, the responsibility for these is shifted, at least in part, to the provider of the work input. If it happens that, in the platform economy, the attainment of the current earnings level requires either a greater work input or better productivity (or both), or, alternatively, earnings will be significantly reduced from the current levels; this will have implications for many issues at the level of both individuals and society – from social security and income distribution to the repositioning of production costs and capital.

In practice, the legal status of workers on platforms need to be safeguarded, as do their social and employment benefits, such as unemployment security and pensions,

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<sup>18</sup> Central Organisation of Finnish Trade Unions SAK 2017. Mahdollisuuksien aika project. <https://www.sak.fi/yhteiskunta/mahdollisuuksien-aika>

wellbeing at work, insurance, and fairness of taxation, while allowing active shifting from one role to another.<sup>19</sup> This is difficult, however, because there is no traditional employer in platform work and hence no employer's obligations; in fact, the elimination of employer's obligations and other costs is a major factor increasing the demand for platform work.

If the premise is that platform work has only secondary value, the consequences can be very undesirable. The result can be that a large share of this work disappears from Finland to developing countries where English is used as the school language. Another potential consequence is that the labour market will become increasingly polarised, when platform workers fall outside many systems and are even marginalised in part.

In welfare state models for different ages, the responsibilities for services and social safety nets are divided differently between the employer, the employee and the state. If the goal is to give (light) entrepreneurs and platform workers the same sense of security and service network as employees, the division of labour between the state and other institutions should be considered. In other words, the division of labour between social institutions must be able to adapt to changes in society and in people's needs. For example, entrepreneurs in Finland have a social security system that is in part poorly known and better than its reputation – it must be developed further while taking into account development of the platform economy.

### **Proposal for action 1: Clarification of the regulation of public administration and platform enterprises and, more widely, the operations on platforms.**

The aim of public administration must be to act as a platform regulator, as a kind of platform of platforms. It is often possible to move from the direct regulation of people to the regulation of the platforms where commerce, work and many other aspects of life take place. Although the main players in the platform economy are international, they can be steered both by country-by-country collaborative measures and by passing regulations in line with the EU. For example, Estonia has, together with Uber, built a workable tax integration system for the service.

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<sup>19</sup> Ailisto, H. (ed.) et al. 2016. Onko Suomi jäämässä alustatalouden junasta? Publications of the Government's analysis, assessment and research activities 19/2016. <https://tietokayttoon.fi/julkaisu?pubid=11201>

***The aim of public administration must be to act as a platform regulator. In setting rules, states must be able to cooperate with each other and with global platform companies. Increasingly often, they must also lay down cross-border rules.***

The new rules may not in every respect be the same as the Finnish labour laws and labour market agreements so far. Still, the outcome of agreement is inevitably better than in a situation where there are no common rules. On the other hand, by cooperating with platform companies and by using open interfaces, it is also possible to promote transmission of the local culture of regulation to the practices of platform work and to build a foundation for global standards<sup>20</sup>. Reports on the regulatory environment of the sharing economy have already been drawn up<sup>21</sup>. They provide a good basis for the continued development of regulation.

## **Proposal for action 2: The state and municipalities to utilise platforms in their own needs for labour**

Much of the public sector activity could be managed on platforms. The state and municipalities have constant labour needs, which may be difficult to satisfy. At the same time, reorganisation based on platform solutions is taking place in the business world. This may bring significant efficiency advantages. It is not desirable if the public sector is left without these benefits. According to a study conducted by the Research Institute of the Finnish Economy (Etlä) for the Government, the most potential growth sectors for platform solutions in Finland exist specifically in the healthcare and social services sector and in transport. Public service production plays a major role in both of these<sup>22</sup>.

Whether the platforms are external or created by the public sector itself, they can provide a flexible way to respond to the public sector's need for labour. They can also enable the spreading of new digital solutions for society's key activities. A step in this direction is the Job Marketplace, now being developed by the Employment and Economic Development Administration, which will bring together vacant private and

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<sup>20</sup> Ailisto, H. (ed.) et al. 2016. Onko Suomi jäämässä alustatalouden junasta? Publications of the Government's analysis, assessment and research activities 19/2016. <https://tietokayttoon.fi/julkaisu?pubid=11201>

<sup>21</sup> Ministry of Economic Affairs and Employment 2017a. Self-employment and sharing economy in the changing working life. Publications of the Ministry of Economic Affairs and Employment 13/2017.

Ministry of Economic Affairs and Employment 2017b. Sharing economy regulatory environment – Challenges and developmental needs Publications of the Ministry of Economic Affairs and Employment 44/2017.

<sup>22</sup> Ailisto et al. 2017. Ibid.

public sector jobs and will help to connect employees with jobs. The digital service concept of continuous learning, also under preparation, aims at an even larger entity combining the Job Marketplace and the Studyinfo ecosystem. By utilising platforms, the public sector can also serve as an example, using its own activities to create practices for a platform-based model that provides decent and meaningful work for those who do the work.

Simultaneously, the utilisation of platform work in the public sector would mean changes to the terms of employment in the public sector. Therefore, it would be advisable to launch a debate on how the spreading of platform solutions will affect the manner in which, and on what terms, work will be done in the public sector in the future.

At this stage, it is still difficult to perceive potential needs for changes in the state budget legislation. A shift to the use of platform work by the state could lower personnel expenses and increase the purchase of services. Liabilities, such as pension liabilities, would decrease at the same time as contractual liabilities would increase and become more complicated. Cost structures would change and new types of permanent expenses could increase.

### **Proposal for action 3: Creating a long-term strategic vision and goals to support growth, mobility and labour immigration**

Without sufficient immigration, the supply of labour and, in the longer term, employment will fall significantly, which has an impact on the dependency ratio and the sustainability gap. Finland needs systematic short and long-term foresight information on the needs for foreign labour and the implementation of recruitment measures abroad, especially in sectors with a shortage of labour force. At the same time, it is essential to improve employment among immigrants of the best working age who are already in Finland. This is particularly important for people with a refugee background and for young immigrants and women immigrants.

As work and tasks change, employees will have to seek new jobs, acquire new skills and be mobile. The meeting of the work and the worker, as well as the continuous accumulation of appropriate skills, can be ensured when people have both good security in all transformations and motivation to be mobile and change their place of work and domicile. Alongside the more extensive need for skilled labour, companies also need special expertise that is not available in Finland. There is global competition for the best experts strengthening companies' growth. Growth-supporting the immigration of skilled people also expands Finland's innovation and knowledge base and supports the acquisition of international investments and experts to Finland, and



hence the creation of new jobs and the internationalisation of Finnish companies and educational institutions.

The availability of foreign labour and people with special skills is influenced not only by permit procedures, but even more so by many other factors: the contents of work, pay, taxation, the housing environment, general attitudes, the number of international schools, the spouse's possibilities to find employment, and the openness, diversity and internationality of the Finnish labour market. Advocacy in the EU and the EU's support on the common labour market are critical — increasing labour immigration requires joint EU solutions and actions, such as active marketing and a smooth permit policy.

Seamless and long-term cooperation between the state, cities, educational institutions, businesses and other actors is required to attract, accommodate and retain international experts and to utilise their skills. If the various services do not work together seamlessly, the experts either won't come or won't stay.

At present, Finnish labour markets, higher education institutions and innovation are too domestic to do sufficiently well in international competition for high competence. At the same time, Finland is losing experts who have already come here, such as foreign students or experts who have arrived in Finland as spouses. The programmes made to increase labour immigration<sup>23</sup> are in the right direction but are insufficient in the long term. They need to be strengthened and expanded considerably. Moreover, the existing services for international experts are too fragmented and dispersed from the point of view of businesses.

### 3.2.2 Contents of work

Until now, people have largely had to adapt to the job descriptions set externally and to develop their skills so that they are comprehensively in agreement with the requirements laid down in advance. The lack of certain skills may have closed doors no matter how good and skilled the person would have been in many other areas of a particular occupation. The incompatibility of knowledge and skills with new requirements also leads to a growing need for labour mobility<sup>24</sup>.

One of the great promises of artificial intelligence and machine learning is that people will be able to combine their skills more seamlessly with both machines and other

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<sup>23</sup> For example, the Talent Boost programme, <https://tem.fi/talent-boost>

<sup>24</sup> Koski, O. & Husso, K. (eds.). 2018. Work in the age of artificial intelligence: four perspectives on economy, employment, skills and ethics. Publications of the Ministry of Economic Affairs and Employment 21/2018.

people, often regardless of time and place. Work tasks can be split more flexibly so that they adapt to human skills, no longer vice versa. In addition, people can increasingly often get important help from machines in tasks that are exceptionally difficult for them to learn. This means that more and more people can focus on developing the skills for which they have the best starting points and the greatest motivation to learn. Similarly, many can be freed from struggling with tasks that are difficult for them and therefore cause mental loading. The result may be a significant leap in productivity and wellbeing, but that requires control and management of the whole. Work management requires, in particular, consideration of human factors in the management of splitting tasks (occupational health, safety, and wellbeing must be understood better as elements of the whole career).

***The great promise of artificial intelligence is that people will be able to combine their skills seamlessly with both machines and other people.***

The Nordic welfare state has leaned on equality and on ensuring the availability of merit goods (housing, healthcare, education) to all citizens. A special feature of merit goods is that their improved availability and widespread use generate significant benefits for society as a whole. Now, digital tools are creating a new category of merit goods. Ensuring equal access to them will be a critical precondition for achieving equality and also a benefit for society as a whole. Therefore, we need to build policy measures that make access to developed AI solutions improving the productivity of work into a universal basic service to which all citizens are entitled. In recent years, some international debate has been conducted on these new universal services and the rights justifying them. In that context, these solutions are called 'universal basic assets'.

This also means an open-minded approach to the application of artificial intelligence solutions and platform solutions in Finnish workplaces. Here, the public sector can be a major promoter of new operating models. They require new models for management and organisation, as well as relevant training. The starting point should then be to increase human autonomy and self-direction through technology, not artificial intelligence or some other technology in itself. In the same way, companies need development of management. Management affects the structures, contents and meanings of work, as well as know-how in workplaces.

## **Proposal for action 4: Each employment relationship provides the opportunity for the employee's continuous and varied development**

Everyone should have the opportunity to develop continuously and variedly in their work. Learning both metaskills and new special know-how is important for the development of both the individual and the organisation. However, amidst the productivity pressures of jobs, it is hard to find time for development and new learning. In this situation, many workplaces from a private entrepreneur to a large organisation drive themselves into a tight corner and productivity competition. In Finland, lack of time is usually the biggest single reason for non-participation in adult education<sup>25</sup>. At the same time, short-term and fixed-term employees receive less training from their employers, while employees in smaller organisations and those with lower education attend adult education less frequently<sup>26</sup>. In the platform economy where there is no traditional employer and the platform operator is not necessarily within the reach of Finnish national legislation, it is hard to see that the platform operator would assume responsibility for the development of individuals' skills, especially as individuals are required to compete even harder in order to sell their work input within the platforms. There is a risk that the costs of developing skills will largely remain the responsibility of society and/or individuals, even more than at present.

***In order to offer everyone the opportunity for continuous development, incentives for employers and platform actors are needed.***

The current training deduction granted to employers<sup>27</sup> is not an adequate incentive. Employers' incentives to invest in skills have been improved by expanding the tax exemption of training paid by the employer. It is hoped that the reform will promote the development of skills based, in particular, on the combination of work and education. Tax deductibility for the costs incurred in the development of skills that is more

<sup>25</sup> OECD 2017. Highlights from the OECD Science, Technology and Industry Scoreboard 2017 - The Digital Transformation: Finland. <https://www.oecd.org/finland/sti-scoreboard-2017-finland.pdf>.

<sup>26</sup> Autor, D.H. 2014. Polanyi's Paradox and the Shape of Employment Growth. NBER Working Paper No. 20485. <http://economics.mit.edu/files/9835>  
Ojala, S., Nätti, J. & Kauhanen, M. 2015. Työn laatu ja myöhempi työura osa- ja määräaikaisessa työssä. Research Project of the Finnish Work Environment Fund 2013–2014. Final Report. University of Tampere, Labour Institute for Economic Research, Finnish Work Environment Fund

<sup>27</sup> An employer can make a training deduction in the taxation of business or agricultural income. This imputed deduction is about half of the wage costs during the training time. A training deduction can be received for up to three training days per employee.

extensive than at present could serve as an incentive for both platform workers and self-employed people.

### **Proposal for action 5: Relevance and meaningfulness of work as the key indicator**

Studies show that employees' productivity increases when they are happy, regardless of economic cycles<sup>28</sup>. A central factor is that the work is experienced as meaningful, which the Ministry of Economic Affairs and Employment has followed for a long time in its Working Life Barometer<sup>29</sup>. The barometer indicates that according to the majority of respondents, experiencing the work as meaningful had weakened in Finland from the end of the 1990s to 2017. In consequence, it can be asked whether this has had an effect on the weak development of work productivity in Finland. At the end of 2017, however, the grades given for changes in the meaningfulness of work and working were more positive than for a long time, and this positive trend should be supported. The meaningfulness of work should be elaborated further as a more central and more measurable working life indicator. At the same time, more resources than at present should be channelled to raising the meaningfulness of work; this would benefit both individuals and the economy. The Ministry of Economic Affairs and Employment has justified the need for a new programme for working life development<sup>30</sup>.

The Report on the Future supports the goal of making the principles of sustainable development steer political decision making more strongly, as well as the goal of expanding the debate on wellbeing indicators that supplement the GDP. The Finnish Parliament has already referred to these in its earlier statement on the global 2030 Agenda for Sustainable Development. The Government notes that alternative or parallel wellbeing indicators have been developed and their use must be strengthened further<sup>31</sup>. In the BKT+ project<sup>32</sup>, and as part of the development of governments' strategic management tools<sup>33</sup>, the Government is working on indicators for the

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<sup>28</sup> Oswald, A., Proto, E. and Sgroi, D. 2015. Happiness and Productivity. *Journal of Labor Economics* 33, no. 4, 789-822.

<sup>29</sup> More information about the Working Life Barometer at: <http://tem.fi/tyoolobarometri>

<sup>30</sup> Declaration of the Working Life 2020 network, 20.6.2018, [http://www.tyoelama2020.fi/ajankohtaista/uutiset/yleiset/tyon\\_kehittamisohjelma\\_vastauksena\\_tyon\\_murroksen\\_tuomiin\\_haasteisiin.5753.news](http://www.tyoelama2020.fi/ajankohtaista/uutiset/yleiset/tyon_kehittamisohjelma_vastauksena_tyon_murroksen_tuomiin_haasteisiin.5753.news)

<sup>31</sup> see e.g. National Institute for Health and Welfare. 2016. Hyvinvoinnin mittaaminen. <https://thl.fi/fi/web/hyvinvointi-ja-terveyserot/eriarvoisuus/hyvinvointi/hyvinvoinnin-mittaaminen>

<sup>32</sup> BKT+ project, 2018, <https://vnk.fi/hanke/-/hankesivu/hanke?tunnus=VNK010%3A00%2F2018>

<sup>33</sup> PAKURI project, 2018, <https://vnk.fi/hanke/-/hankesivu/hanke?tunnus=VNK009%3A00%2F2018>

wellbeing economy. The aim is the wider use of information on wellbeing in decision making.

### 3.2.3 Skills

The Finnish education system is a globally known success story. Thanks to this, the entire population's basic preparedness and preconditions to develop their skills throughout life have been raised to an unprecedented level. At the same time, the comprehensive school system is a good example of an industrial-age institution that has become the foundation for the nation's success.

One of the most tangible features of the transformation of work is the change in various trades and tasks. This means the disappearance of some trades, a change in the contents of various tasks and the emergence of new job descriptions. The change may mean that students who are at an early stage of their studies will never be able to find work in their own field. This challenges the basic principles of the current education system. It is becoming increasingly difficult to anticipate what skills will be in demand and how many people need to be educated for various occupations. Fewer and fewer qualifications can guarantee that relevant work will exist all through life. In many of the previously steady sectors (e.g. banking or transport), a large segment of the labour force is subject to constant retraining pressure and changes. The artificial intelligence programme predicts that, within 10 years, a million Finns will need retraining<sup>34</sup>. The skills of immigrants are a particular concern, as the differences in skills between the mainstream population and immigrants are wide in Finland<sup>35</sup>. Likewise, it is vital to dismantle gendered structures and attitudes so that, from early childhood on, people can make choices based on their own skills and interest.

In recent decades, it has been said that lifelong learning is the answer to changes in competence requirements. The current idea of lifelong learning relies heavily on individuals' autonomy and self-direction. Upgrading skills or acquiring a new occupation requires strong motivation at the later stages of one's career.

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<sup>34</sup> Koski, O. & Husso, K. (eds.). 2018. Work in the age of artificial intelligence: four perspectives on economy, employment, skills and ethics. Publications of the Ministry of Economic Affairs and Employment 21/2018.

<sup>35</sup> Ministry of Education and Culture. 2018. Työn murros ja elinikäinen oppiminen. Report of the working group on the development needs of lifelong learning. Publications of the Ministry of Education and Culture 2018:8.

According to Parliament's report<sup>36</sup>, it is important to develop a low-threshold skills system as an entity continuing from early childhood education to modular continuing and conversion education so that learning is lifelong and skills cumulate. Cooperation between different levels of education must be seamless and flexible, and study paths must be smooth across educational levels and educational institutions. In its statement on the Government Annual Report<sup>37</sup>, the Committee for the Future also encourages the promotion of lifelong learning in a manner as brave and innovative as possible. For example, the updating of skills associated with the integration of immigrants should be taken into account as part of lifelong learning. Continuous learning must be made into a national strength for Finland, similar to the comprehensive school. The challenge is, for example, that there is no overall picture of public funding for continuous learning<sup>38</sup> — this should be addressed.

The current education system is inadequate to organise continuous learning effectively. Its basic idea is still to educate children and young people through school into working life. Finland needs a reform for continuous learning<sup>39</sup>, which can direct education across the whole population and to support changes in work much more systematically than at present. In its spending limits discussion of 2018, the Government adopted the policy of giving more weight to non-degree education when allocating funds to higher education institutions. This is a step in the right direction. Alongside reorientation of the supply of existing educational institutions, it is important to encourage companies and other workplaces to invest in training their employees and in learning new skills.

Renewal of skills during the career must be developed as an entity from the perspective of people having different life situations, different types of employment, and different educational needs. The key legislation is currently scattered across

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<sup>36</sup> Committee for the Future. 2018. Committee Report TuVM22017 vp - 6/2017 vp. Government Report on the Future, Part 1: A shared understanding of the transformation of work.

[https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM\\_2+2017.aspx](https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM_2+2017.aspx)

<sup>37</sup> Committee for the Future. 2018. Committee Statement TuVL 2 /2018 vp — K 11/2018 vp. Government Annual Report 2017.

[https://www.eduskunta.fi/FI/vaski/Lausunto/Sivut/TuVL\\_2+2018.aspx](https://www.eduskunta.fi/FI/vaski/Lausunto/Sivut/TuVL_2+2018.aspx)

<sup>38</sup> UNIFI, Arene and Association of Finnish Independent Education Employers, press release 24.8.2018, <http://www.unifi.fi/tiedotteet/unifi-arene-ja-sivistystyonantajat-esittavat-kolmen-keinon-tyokalupakkia-jatkuvan-oppimisen-edistamiseksi/>

<sup>39</sup> Ministry of Education and Culture. 2018. Jatkuvan oppimisen Suomi. Osaamisen tulevaisuuspaneelin kannanotto. <http://minedu.fi/documents/1410845/7127789/Jatkuvan+oppimisen+Suomi.+Osaamisen+tulevaisuuspaneelin+kannanotto/>

Ministry of Education and Culture. 2018. Suomi tarvitsee jatkuvan oppimisen reformin. [http://minedu.fi/artikkeli/-/asset\\_publisher/suomi-tarvitsee-jatkuvan-oppimisen-reformin](http://minedu.fi/artikkeli/-/asset_publisher/suomi-tarvitsee-jatkuvan-oppimisen-reformin), 26.3.2018.

ministries. So that people would understand their possibilities better, it should be determined how to bring together legislation, for example, into one legal code on skills.

Parliament challenged the Government to pay attention to young people in the second part of the Report on the Future<sup>40</sup>. Youth unemployment, its causes and solutions have been explored in recent years, among others, by VATT Institute for Economic Research<sup>41</sup> and Statistics Finland<sup>42</sup>, as well as the OECD in its reports Society at a Glance. According to the studies, the main challenges to young people's employment pertain to education and, as with other employment, economic growth. For young people, remaining outside education and work is an indicator forecasting exclusion. Education is the most likely solution to changes on the labour market and to the prevention of young people's exclusion, but it requires understanding of the mechanisms of exclusion from childhood to early adulthood and, for example, the long-range effects of even short-term unemployment on the career of a young person.

In its programme, the current Government has focused especially on young people who are not in employment, education or training (NEET). The aim is to cut the number of young people who are not in education and employment, to reduce dropping out of education and to promote the employment of young people. To prevent exclusion and to strengthen inclusion, action needs to be taken already in basic education and even earlier. The Government considers that these goals will remain pivotal in the future as well. Similarly, young unemployed people have always been a key target group in labour policy. However, strictly limited target groups will not necessarily be the best, or even feasible, basis for decisions in the future; transformation of work blurs definite demarcations, for example, between the employed, the unemployed, the self-employed and students, regardless of age.

So that each individual in current educational institutions, regardless of family or linguistic background or gender, could find the motivation and enthusiasm for an activity or a phenomenon, a stronger emphasis on metacognitive abilities and on knowing how to learn is needed. Subsequent levels of education, in turn, can focus on more specific skills, knowledge and abilities. In the future, the education system

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<sup>40</sup> Committee for the Future. 2018. Committee Report TuVM22017 vp - 6/2017 vp. Government Report on the Future, Part 1: A shared understanding of the transformation of work.

[https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM\\_2+2017.aspx](https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM_2+2017.aspx)

<sup>41</sup> Hämäläinen, U. & Tuomala, J. 2013. Faktaa nuorisotyöttömyydestä. VATT Policy Brief 2/2013, <https://vatt.fi/faktaa-nuorisotyottomyydesta>

<sup>42</sup> Karhunen, H. 2017. Nuoret eivät pärjää ilman oikeanlaista koulutusta. Tieto&Trendit, 7.3.2017, <http://www.stat.fi/tietotrendit/artikkelit/2017/nuoret-eivat-parjaa-ilman-oikeanlaista-koulutusta/>

should also reach the age and population groups who are now largely excluded from it. This means the direction of the current vocational and higher education to people already at work, new types of study paths and qualifications provided by educational institutions, new forms of continuing education in vocational schools, higher education institutions and the existing adult education institutions, as well as digital learning environments and new ways to certify skills learned at educational institutions and acquired through practice. From the perspective of the age structure, actors and objectives, the future education system will be broader than now.

Greater attention needs to be paid to the development of immigrants' skills and to their access to the labour market. In particular, the employment of immigrants with a refugee background and the employment of immigrant women and young people is considerably weaker than that of the mainstream population. During this government term, major reforms have been made both in integration education and in the general education system to speed up the educational and employment paths of immigrants. The working life orientation of integration will have to be strengthened and it must be ensured, both in special integration services and in general training and other structures promoting employment, that their suitability for developing the skills of the immigrant population is taken into account.

The Ministry of Education and Culture has launched reforms ranging from early childhood education to higher education. Their overarching principle is to make lifelong learning a reality meeting the needs and life situations of different learners. These include, for example, the New Comprehensive School programme launched in 2016, and the new Upper Secondary School Act and the vocational education reform, both of which entered into force in 2018. The intention is that the education under reform will be better able to respond to the rapidly evolving needs of different individuals, businesses and working life and to advance the development of broad understanding, for example through cross-curricular studies and closer cooperation between higher education institutions. The field of higher education has drawn up the vision 2030 for higher education and research. Its implementation started at the beginning of 2018. One of the goals of the vision is that more than half of young people aged 25–34 years complete an academic degree. The provision of teaching that enables continuous learning in higher education institutions is also increased and its accessibility is improved.

### **Proposal for action 6: Artificial intelligence to aid in identifying skills and converting them to be relevant**

Slowness in the conversion of skills is a major obstacle to the development of growth and employment. Training for a new occupation is typically a process that takes



years, especially if a new study path is started from the very beginning. It would therefore be important to identify people's basic skills that, as easily as possible, could be converted into occupational skills that are just about to be in demand.

Artificial intelligence solutions can provide assistance in converting skills. The HeadAi company<sup>43</sup>, which won Sitra's Ratkaisu 100 challenge prize competition, helps people, businesses and providers of education to identify existing basic skills that — with relatively small additional education — could be converted into special skills for which there is growing demand, for instance, in a specific region. This will, for example, promote the location decisions of businesses and steer people to education where their previous skills can be utilised as well as possible. The digital service entity for continuous learning, which is being developed in cooperation by the Ministry of Education and Culture and the Ministry of Economic Affairs and Employment<sup>44</sup>, is an opening in the right direction. It embraces career planning, charting and recognition of skills, matching the skills needed by the individual and the job and the skills services, as well as the realisation of the actual learning process. The adoption of similar solutions by the state and municipalities would be a clear sign of taking the conversion of skills to the centre of employment policy. For example, the artificial intelligence assistant Aurora, currently under construction, can help the public sector to develop services in a new way<sup>45</sup>.

In its report<sup>46</sup> on Part 1 of the Report on the Future, Parliament's Committee for the Future required that the scope of examination should also cover phenomena and trends where technology creates new work. The Government's new, already launched, openings in the field of new technology relate in particular to artificial intelligence (the national artificial intelligence programme) and to the platform and sharing economy (e.g. guidelines on the legislation associated with the sharing economy and on various statutory obligations).

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<sup>43</sup> HeadAI. <https://ratkaisu100.fi/tiimit/artikkeli/headai-osaamisen-tunnistaminen-keinoalyn-avulla/6388358>

<sup>44</sup> Ministry of Education and Culture, 11.4.2018, Opetusministeri Sanni Grahn-Laasonen: Hallitus lisää resursseja koulutukseen, [https://minedu.fi/artikkeli/-/asset\\_publisher/hallitus-lisaa-resursseja-koulutukseen-kielten-oppiminen-alkamaan-jokaluokalta](https://minedu.fi/artikkeli/-/asset_publisher/hallitus-lisaa-resursseja-koulutukseen-kielten-oppiminen-alkamaan-jokaluokalta)

<sup>45</sup> Tekoälyverkko Aurora helpottamaan jokaisen arkea, 19.6.2018, <https://www.tekoalyaika.fi/2018/06/tekoalyverkko-aurora-helpottamaan-jokaisen-arkea/>

<sup>46</sup> Committee for the Future. 2018. Committee Report TuVM22017 vp - 6/2017 vp. Government Report on the Future, Part 1: A shared understanding of the transformation of work. [https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM\\_2+2017.aspx](https://www.eduskunta.fi/FI/vaski/Mietinto/Sivut/TuVM_2+2017.aspx)

**Proposal for action 7: Reduce efforts to steer education by anticipating the need for skills. Instead, the focus of education is shifted more to basic skills and metaskills.**

During the last few decades, the provision of education has been steered by extensive forecasts of the needs for skills. The task has proved to be difficult. An even greater problem is that training people for qualifications in general is slow. In practice, it takes at least five years between the decision to introduce a new field of education or to expand an old one and the entry of the first graduates into the labour market. In a rapidly changing world, this route is simply too slow. At its worst, the result is that people are trained hurriedly for a narrow field of competence where demand is already shrinking.

Alongside the degree structure of higher education institutions, new forms of continuing education must be created to enable people already in working life to aim their skills at new tasks.

***In a world where technology is rapidly evolving and most people work in several occupations during their lifetime, it is important to support people's preparedness to learn new things.***

It is clear that this does not apply to all sectors. It will continue to be necessary, for example, to train highly specialised healthcare professionals, who at the same time have solid theoretical knowledge.

Updating digital skills is also critical in all population groups. Almost half of the European population lacks basic digital skills<sup>47</sup>. In all education, more weight should be put on the skills of the artificial intelligence era, such as communications and social skills and cognitive skills requiring creativity<sup>48</sup>. In addition, education and training must offer a comprehensive set of studies developing basic mathematical skills. These are very important for strengthening young people's digital skills. Solutions for youth unemployment and the exclusion of young people are sought in digital skills throughout the EU.

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<sup>47</sup> European Commission. 2017. The Digital Skills Gap in Europe.

<https://ec.europa.eu/epale/en/resource-centre/content/digital-skills-gap-europe>

<sup>48</sup> Koski, O. & Husso, K. (eds.). 2018. Work in the age of artificial intelligence: four perspectives on economy, employment, skills and ethics. Publications of the Ministry of Economic Affairs and Employment 21/2018.

## Proposal for action 8: Creating a career account or a training voucher for people over 35 years of age

For adults, income during studies is often a bigger issue than the cost of education. The ideal situation is that a person is able to study alongside work. In Finland, the adult education allowance has been shown to have positive effects on the promotion of education and the changing of occupations: In all, 42 per cent of those who started studies by means of the adult education allowance in 2011 completed a higher degree than before within the next four years (cf. 4 per cent of the control group). During the same period, they also changed their occupation clearly more often than their controls<sup>49</sup>. At the same time, however, the adult education allowance is in low use, for example, among industrial workers, and it is only granted for full-time study periods<sup>50</sup>.

In addition to the full-time study allowance, the scope of the adult education allowance should be expanded to include other studies for upgrading skills. Furthermore, career counselling and electronic services utilising AI should be developed as help for finding new types of learning paths to new skills. The SkillsFuture Credit in Singapore and the French *compte personnel d'activité* are examples of support granted for the continuous upgrading of skills. For example, an annual personal education budget calculated on the basis of hours worked, combined with extensive career counselling and the supply of modular, flexibly available education, would guarantee the opportunity for continuous learning independent of the employer. The report of the Artificial Intelligence Working Group<sup>51</sup> also proposed a skills account that would enable employees to acquire the training they need from providers of training services, and thus to develop their skills. The right to education would also encompass unemployed people, working-age people excluded from the labour market, as well as entrepreneurs.

People who have completed basic education, as well as groups that currently participate in adult education less frequently than others, should be encouraged to join in.

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<sup>49</sup> Kauhanen, A. 2018. The Effects of an Education-Leave Program on Educational Attainment and Labor-Market Outcomes. Etna Working Papers No. 56. <https://www.etla.fi/julkaisut/the-effects-of-an-education-leave-program-on-educational-attainment-and-labor-market-outcomes/>

<sup>50</sup> Ibid.

<sup>51</sup> Koski, O. & Husso, K. (eds.). 2018. Work in the age of artificial intelligence: four perspectives on economy, employment, skills and ethics. Publications of the Ministry of Economic Affairs and Employment 21/2018.

***In addition to the adult education allowance, career counselling as help for finding new kinds of learning paths to new skills should be developed.***

## **Proposal for action 9: Higher education and skills development for different situations of life**

Finland has a fairly broad network of higher education institutions. Thanks to this, it has been possible for the working life to utilise the research, development and innovation (RDI) know-how of higher education institutions, while young people have been able to apply for higher education close to their home region. This has strengthened the accessibility and equality of higher education, and has improved the supply of skilled labour and the facilities available to enterprises across the country.

When moving to a society where the evolution of occupations is rapid and the skills needed on the labour market change frequently, higher education institutions must be better equipped and more systematic in providing teaching, development of expertise and RDI know-how also for people who already have an occupation and possibly also a degree<sup>52</sup>. This would largely be done by expanding the supply of education and by offering new types of study modules and complete degrees that enable a flexible study schedule. While developing the supply of education, it is important to ensure that education is easy to find: the compatibility of information on studies and teaching, the development of joint models and, among other things, a common outlook on the supply of teaching (platform solution).

In the development of higher education, research as the provider of new knowledge is at the core. Finland's competitive edge — skills and a strong knowledge base — is built through teaching based on research. In this way, the solid RDI activities and the wide selection of courses in higher education institutions will have a greater potential to serve as agents of change for society and the industrial structure.

***Higher education institutions must also offer more education to those who already have an occupation or a degree. Flexible study modules are needed, with little attendance and classroom teaching.***

In this situation, the scale of the higher education network can be an important advantage: almost everyone has access to higher education in their own home region, which lowers the threshold, in particular among people who already have a job and a family, to set out on a project supplementing their skills. This may be important even if

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<sup>52</sup> Ministry of Education and Culture 2017. Vision for higher education and research in 2030. <http://minedu.fi/korkeakoulutuksen-ja-tutkimuksen-visio-2030>

an increasing share of the future studies were organised as online lectures and in digital learning environments.

In its future steering, the Ministry of Education and Culture could put increasing emphasis on higher education aimed at people already in working life. Similarly, higher education institutions could have the right to collect fees for this teaching.

### **Proposal for action 10: Graduates' relationship with higher education institutions to last a lifetime**

In the future, relationships with both universities and universities of applied sciences must be maintained throughout working life. At present, teaching in higher education institutions is, in principle, open to all, but few people know how or want to seek education without the right to pursue a degree. At the same time, higher education institutions are offering different types of continuing education, and international studies are offered online even free of charge.

The alma mater could have an exceptional opportunity to reach out to its former students and to have them upgrade their skills. There will be better opportunities for continuous learning when the digital supply of education at higher education institutions improves and cooperation between educational institutions for the provision of teaching is strengthened. Higher education institutions also play a key role in addressing regional needs; regional networking between jobs and educational institutions should be strengthened further.

By targeting its steering at universities and other higher education institutions, the Ministry of Education and Culture can encourage them to maintain contacts with alumni. In the continuous relationship between higher education institutions and graduates, some of the alternatives could be free of charge and some could be provided for a fee. The costs could be covered by the employer, the individual or the state, through the career account or training voucher presented in this chapter. Special attention should be paid to an open, flexibly accessible supply of education, to the streamlining of the continuous learning offered, and to the related communication.

### **Proposal for action 11: Studying on the earnings-related unemployment allowance**

The main objective of the earnings-related unemployment allowance is to assist qualified people already in working life over short periods of unemployment. It has also attained this goal. This has brought predictability both to the individual's life and to companies' supply of labour.

***Since learning new skills and the conversion of one's own know-how will become increasingly important, it must be ensured that people develop their skills, driven by their own motivations, even during unemployment.***

At present, the earnings-related unemployment allowance does not encourage unemployed people to study new skills. The earnings-related unemployment allowance is still seen as an instrument for coping between two jobs, not as a bridge from one occupation to another. It is already possible to complete an unfinished degree or to obtain a vocational qualification with the support of the earnings-related unemployment allowance if the studies are considered to improve employment. However, there is no obligation to study new skills.

At present, there is pressure to make unemployment allowance more activating and to ensure that job seekers are not left waiting over long periods of unemployment so that they can find work in their own sector and close to home. Sometimes the more widespread activation of the unemployed steers people increasingly often to accept work that is less demanding than their level of education. If raising the skills level is a national objective, it must be ensured that people also develop their own skills during unemployment periods. Similarly, it must be ensured that suitable short-term studies are available.

### **3.2.4 Income**

In 2018, the social security system is not sufficiently well designed to enable the combination of different types of income, the development of one's own skills or experimentation with new occupations, alongside job-hunting. A step forward is to take the social security system to a direction where the basic premise is not an employment relationship, but rather a more neutral approach to different types of income. In addition, the social security system will have to guide the individual to learning and development, as shifting from one occupation to another will become more common as the transformation of work progresses (see Skills Security<sup>53</sup>). Acquiring a new occupation should not lead to a significant reduction in income compared to the level of unemployment allowance. However, when unemployment

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<sup>53</sup> The TOIMI project on the overhaul of basic security and activity, 17.5.2018, Voisiko se olla osaamisturva? [https://vnk.fi/toimi/artikkeli/-/asset\\_publisher/voisiko-se-olla-osaamisturva-](https://vnk.fi/toimi/artikkeli/-/asset_publisher/voisiko-se-olla-osaamisturva-)

allowance is used to support studies, the current level of student financial aid must be considered and care must be taken not to distort the system in that respect.

The current social security system is largely based on the assumption that people mainly exchange one full-time employment relationship for another, and different forms of social security help to even out these transitions financially. The purpose is to guide people to seek livelihood on their own terms, away from living on social security. Instead, with the exception of student financial aid, the aim is not to develop the citizen's own skills or resources.<sup>54</sup>

The central phenomenon expected of the transformation of work is that, for people who have lost their job, finding new income and a new occupation may require various stages, including study, part-time work, entrepreneurship and moving between various places and countries. The unexpected challenges encountered on this journey may reduce income. The more bureaucracy traps are involved in social security, the harder it is for people to plan their future and take controlled risks. Risks that are considered excessive, and constant concern about income, weaken people's cognitive capacity and initiative<sup>55</sup>. The social security system should strengthen people's confidence in their income and prevent poverty-induced deterioration of functional capacity.

## **Proposal for action 12: A broad-based debate on social security options**

In the near future, decision-makers will have to consider whether the input into social security should be the same or greater or smaller, and whether it is currently targeted in the right way. Only when the purpose and goals of social security are clarified can we speak of means in a concrete way. TOIMI, the project to overhaul basic security and activity<sup>56</sup>, is building options for this. In the coming government terms, guidelines should be drawn up for the directions that the overall reform of social security will take.

Debate on basic income and its features can still be part of the basic security reform, but it cannot be raised past other models, such as General Security, Life Account, Participation Income and Universal Credit. There are several basic income models, one of which is being tested in 2017–2018. Above all, this experiment identifies the

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<sup>54</sup> Saari, J. 2017. Sosiaaliturvariippuvuus: sosiaalipummit oleskeluyhteiskunnassa? Tampere University Press.

<sup>55</sup> Mani, A., Mullainathan, S., Shafir, E. & Zhao, J. 2013. Poverty Impedes Cognitive Function. *Science*: Vol. 341, Issue 6149, pp. 976-980. DOI: 10.1126/science.1238041.

<sup>56</sup> The TOIMI project on the overhaul of basic security and activity, <http://vnk.fi/toimi>, 8.6.2018.

impact of reducing social-security-related bureaucracy on employment. The target group consists of the long-term unemployed. Elements of the basic income type (e.g. universality and independence of income) already exist in the current social security system; an example is the exempt amount of social assistance or the guarantee pension. For a long time, the basic features of Finnish social security have been extensive personal rights and comprehensive basic security benefits, which do not exist elsewhere in the world.

The basic income has much potential in the reform of the social security system, but it is essential to define what is meant by basic income. Is the aim to improve the employment of the unemployed, the flexible transition of people from one occupation, competence and income type to another, or the wellbeing and inclusion of people with low income? And how broadly does the basic income replace other benefits, and how is it linked with the tax system? Many of these issues can be explored better when the national real-time incomes register is taken into use in 2019. The incomes register will provide a base for more flexible reconciliation of earnings and social benefits in the future.

As the transformation of work progresses, the need to reform social security will increase. A ready-made, working solution is not in sight, neither in Finland nor elsewhere. It is essential that social security can be kept at a level that is sensible for the individual, while preventing polarisation and exclusion.

### **Proposal for action 13: Creating incentives for people of working age, not only for paid work but also more widely for other activities, such as studying and volunteering**

Working is valued for many different reasons. Generating economic value added to the economy is one reason, acquiring income for the individual and the household is another. In addition, there are many other sources of value, such as belonging to a community, gaining respect, and the feeling of one's own usefulness.

***Public administration should emphasise the pluralism of work and not try to define work only as a means of gaining productivity and earnings. The primary objective is to ensure the active participation of all citizens and the preservation of their functional ability.***



This means, for instance, that in unemployment allowances based on the activity requirement, or in models such as basic income, the activity requirement could also be satisfied by other forms of activity besides traditional paid work. Examples include different types of studies, volunteering, household work, peer care work and various kinds of fourth sector activities. Of course, there are already specific forms of support for these purposes, such as study grants, child home care allowance, support for informal care and rehabilitation benefits. The present challenge is the different levels of benefits, as unemployment benefits are generally higher than the benefits mentioned above. This calls for value discussion and clarification of goals: should more money be used for social security, or should the money be allocated differently? Funding for social security must also be managed so that both the beneficiary and the payer feel that the system is legitimate. Similarly, attention still needs to be paid to issues such as earnings trends between women and men.

Intended for working-age people fit for work, the system helps them to enter the labour market and encourages them to continue at work. Sometimes the road to working life can pass through new studies or supported work. For people with partial work ability as well, the path to working life must be developed so that they can utilise their remaining capacity to work.

### **Proposal for action 14: Removing barriers to automating work tasks**

Especially at the global level, workplaces still have many tasks that are straightforward mechanical work without meaningful human contacts. They can be described in instructions and routinised exhaustively. In principle, it would be perfectly possible to automate or robotise these tasks. An example of such work is the job of a logistics centre packer, the importance of which is rising as online shopping grows. In many situations, the cheapness of human labour prevents the company from investing in automation.

Legislation should aim at the automation of such globally low-income jobs, for example by developing regulation supporting new technologies, by means of flexible social security or by similar measures. Critical discussion of minimum wages is also needed. The solution leads to decent work in line with sustainable development, that is, proper work worthy of a human being<sup>57</sup>. The proposed solution, however, is not the same as the elimination of low-income work — regardless of pay, work must provide

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<sup>57</sup> Goal 8 of the 2030 Agenda for Sustainable Development: Decent work and economic growth. [http://www.fi.undp.org/content/finland/fi\\_fi/home/post-20151/sdg-overview/goal-8.html](http://www.fi.undp.org/content/finland/fi_fi/home/post-20151/sdg-overview/goal-8.html)

opportunities for both development as a human being and meaningful interaction with others.

To minimise such work is to redeem the promise of technological development: transition towards a labour market where work is meaningful and humane for all, and guarantees the possibility to be independent.

The first step is to support cooperation between artificial intelligence and humans. Technological breakthroughs allow new types of work where solutions using artificial intelligence manage routines, and tasks such as planning are done by humans. In this way, artificial intelligence can also support the return of outsourced work to Finland.

### **Proposal for action 15: Full utilisation of digitalisation at the junctures of working life**

In the transformation of work, support is needed for all junctures in life. Traditionally, these include transition from education to work, transition from one job to another (cf. short-term employment, periods of unemployment), return to work from sick leave or return to work from family leave. In the future, there may be even more junctures of different kinds, and they may occur more frequently. Similarly, international mobility is growing and requires support.

Digitalisation enables the creation of a real-time and proactive picture of people's life situations. Numerous public and private bodies collect and produce data on people's life situations, such as their standard of living, education, consumption and even social relationships. Public data from different sources has already begun to be collected centrally — for example, the Suomi.fi service brings together a variety of electronic public services and information found in people's various registers, the Kanta service collects people's health data in one place, and the real-time national incomes register to be adopted in Finland in 2019 does the same for incomes data, thus facilitating the reconciliation of earned income and social security and also alleviating the administrative burden on businesses.

The next step would be to utilise more versatile public and private data sources, and to use machine learning and artificial intelligence to analyse data and identify the necessary interventions. In this way, people can be offered the right, and increasingly better, public services in a timely manner. Then the finding of the services would not depend only on the individual's initiative or the 'manual cooperation' of the various authorities. This could mean that by using computers to combine, for example, data on the number of social relationships produced by social media, medical data on the body mass index and genetic health history, incomes register data on income, and

shops' data on food purchases, it would be possible to anticipate and prevent health problems in advance. This requires rapid adoption of new skills and tools in the public sector.

### **Proposal for action 16: Directing employment-promoting subsidies towards work that includes interaction and promotes sustainable development**

Until now, the idea behind supporting employment has been that all work tasks and occupations are of equal value. In the future, automation may increase inequality between jobs. Pay subsidies and other incentives supporting the use of human workforce improve the profitability of human work and can slow down automation. This may lead to a prolonged — and for humans, hopeless — competition between human work and machines.

***Employment-promoting subsidies should be targeted at work tasks that are not about to be lost due to automation and that generate significant social value. Correspondingly, subsidies should no longer be granted for work tasks that can be automated.***

Tasks associated with human interaction, such as carers' occupations, will always be in great demand. It would therefore be important to target pay subsidies that support employment and the development of new skills at work tasks that are not about to be lost due to automation and that generate significant social value and inclusivity in keeping with the goals of sustainable development. Correspondingly, pay subsidies should no longer be granted for work tasks that could be automated.

At the same time, support could be used for creating work that is no longer linked with increased exploitation of natural resources and fossil fuels. That is, support should be targeted at work that promotes the transition to renewable natural resources and the circular economy.

### **3.2.5 Meaning of work**

The added value produced in the digital economy no longer shows in the GDP trend in the same way as material added value does. Many new services raise people's experience of the quality of life but are not seen as economic growth. Media industry applications, such as Spotify and Netflix, are good examples of this.

The experience of meaningfulness to the widest possible group is one of the most important goals of society. After the Second World War, Finland implemented various

key elements of the welfare state. The core idea of these elements was that as many members of society as possible should be involved in society as active members. In the 1960s, the implementation of this idea was relatively straightforward. The working population, i.e. the labour force, had to be kept healthy and capable. Much benefit was gained from the fact that, after the war, women played an exceptionally strong role in the national labour force. A factor that will have a major impact on the structure of the labour force in the future is immigration<sup>58</sup>.

***Experience of meaningfulness is one of the most important aspirations of both the individual and society.***

States that know how to make the most of the skills of individuals are successful. In the age of information work, the model of the welfare society means increasingly often that the skills and motivation of individuals are brought out to produce something concrete.

Finland should build models of social appreciation not only through economic value production, but through all human activities. This is the basis for a new Nordic model.

### **Proposal for action 17: A versatile perspective on work ability**

As the physical workload decreases, the mentally and socially burdening factors of work are highlighted. Fragmentation of careers gives rise to uncertainty about the continuation of work, which can cause stress. If the work of the future consists of many different actions, the assessment and management of employees' overall workload will become even more important. Changing work and different kinds of workloads also require that people have strong mental health and good mental health skills.

Demographic change calls for a higher retirement age, and therefore the ability to work and be active longer than now. People's own preparedness to maintain their work ability, functional capacity and skills is emphasised, but it is important to support older people to stay active and satisfied with their work longer. As the meaning of work changes, skills and motivation must be seen as an important element of work ability, in the same way as health. If a person is not in the position of an employee, such as entrepreneurs or platform workers, taking care of work ability and, for example, arranging occupational health care are voluntary at present. In practice, it is

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<sup>58</sup> Pentikäinen, L. (ed.) 2014. Katsaus suomalaisen työn tulevaisuuteen. Publications of the Ministry of Economic Affairs and Employment. Employment and entrepreneurship 30/2014

important to guarantee, for instance, the integration of occupational health care into the new health and social services system and to enable multiprofessional support for work ability to all who need it.

### **Proposal for action 18: Adopting a pluralistic societal perspective on work, a mere competitiveness perspective is not enough**

During the preparation of Part 1 of the Report on the Future, the researcher team reviewed 86 recent reports on the future of Finnish work<sup>59</sup> and discovered two principal ways to talk about work. The first group of speakers wants economically viable work now. From the perspective of competitiveness, it is important to take new technologies into use rapidly and to hone organisations and people to be effective. The second group wants a new value formation for work. It cannot be described in a language we are accustomed to and its value cannot be calculated using the familiar economic indicators. These two conversations about work generally do not meet.

***Apart from obtaining an income measurable in money, work fulfils many other values in society. Therefore, in politics, too, work must be examined from many angles; in the future, even less through the economy and competitiveness than at present.***

In political language, the talk of work focuses on the economy of work. It means concepts such as work supply, demand, price, labour force, and unemployment and employment rates. It is typical of this talk to efface individual people and jobs and explore the impact on the national economy, general government finances and the current account. Concerns about work are bound to indicators that are based on a long tradition of research, expert organisations and interlinked systems. When one of these key indicators stirs, the response follows the script. The Finnish labour market system has many components but few moving parts.

In its report, the Committee for the Future hoped to see diverse indicators for examining future work<sup>60</sup>. In the coming years, the relationship of work to the generation of economic added value and competitiveness will become increasingly complicated. Therefore it is important that, in politics, work is examined from many

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<sup>59</sup> Dufva, M., Halonen, M., Kari, M., Koivisto, T., Koivisto, R. & Myllyoja, J. 2017. Toward a shared understanding of the future of work. Publications of the Government's analysis, assessment and research activities 33/2017. <http://tietokayttoon.fi/julkaisu?pubid=18301>.

<sup>60</sup> Committee for the Future 2018. Ibid.

angles; in the future, even less through the economy and competitiveness than at present. The Government has discussed the challenges associated with the measurement of work productivity and the digital economy, for instance in a study project launched by the Economic Council<sup>61</sup>.

### 3.3 Long-term decision making for taking solutions to the finish

For state administration, the rapid change of society means that the development process related to major transformations, reforms and other issues requiring long-term decision making cannot be planned very far in detail. Instead, it is possible to set relevant values and broad goals and navigate towards achieving the goals by means of systematic learning that is as quick as possible. State administration already has a number of useful structures and practices, such as the sustainable development goals, for setting long-term visions and defining common values and goals.

The UN Agenda for Sustainable Development, the 2030 Agenda, was approved by Heads of State and Government and is a document politically binding on States. The time span of the Agenda is 2016–2030, which makes it well suited to serve as a broader framework for long-term decision making. The 2030 Agenda consists of common principles, 17 goals and 169 targets specifying the goals, the means of implementation and a common monitoring and evaluation system for implementation. National policies must be aligned with these.

#### ***Sustainable development to guide long-term decision-making***

Taking account of long-term complex change factors in administration is challenging. Government terms cut by elections and the nature of future challenges hinder future-oriented administrative planning. However, political administration is geared up for the future, irrespective of time and place. In practice, however, administration may be short-sighted, i.e. for one reason or another the future has been taken into account insufficiently in strategic planning or in the implementation of measures.

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<sup>61</sup> Kotiranta, A., Koski, H., Pajarinen, M., Rouvinen, P. & Ylhäinen, I. 2017. Digitalization changes the world – are new statistics needed to support economic policy? Prime Minister's Office Reports 2/2017. <https://vnk.fi/julkaisut/julkaisu?pubid=URN:ISBN:978-952-287-417-7>

Long-term decision making can be seen as part of the idea of good governance: it differs from short-sighted administration in that the importance of the time axis and the challenges brought by the future have been taken into account better.

There is much empirical evidence on the problem of short-sighted administration. It has been studied, among other things, in the contexts of climate change, pension funds and disaster prevention<sup>62</sup>. The timeline that should be taken into account in administrative matters naturally depends on the administration themes to be handled. For example, in building projects or in themes associated with national security, the long term may be 50 years, while in matters relating to the handling of nuclear waste, it is tens of thousands of years. Many administrative challenges are by nature such that meeting them requires consideration of long time spans. Climate change, immigration, security policy, education policy, future demographic changes, structural needs for change brought by technologies, and responding to changes in the social environment require strategic planning that exceeds four-year government terms.

Public administrations often fail to take the future into consideration well when planning and implementing administrative strategies. Many factors make future-oriented administration challenging; for instance, the interests of political decision-makers in getting re-elected, complex and changing challenges, the general outlook of the visions of the future, the limitations of statistical and other methods in mapping the operating environment, the limited nature of many scientific methods in strategic planning, diminishing resources, the impatience of voters and the efforts of interest groups to modify the direction of administration.

In addition, tackling global challenges such as climate change is, from the outset, considerably more challenging than achieving national goals such as functioning healthcare and social welfare regions. While the nature of challenges plays a great role in successful long-term administration, the challenges themselves do not determine the success or failure of strategies. For one reason or another, the administrative system may also fail in creating long-term strategies even when faced by simpler challenges.<sup>63</sup>

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<sup>62</sup> Healy, A. & Malhotra, N. 2009. 'Myopic Voters and Natural Disaster Policy', *American Political Science Review*, 103 (3), 387–406.

Jacobs, A. 2011. *Governing for the Long Term: Democracy and the Politics of Investment*. New York: Cambridge University Press.

<sup>63</sup> Boston, J. 2014. *Governing the Future: How to Bring the Long-Term into Short-Term Political Focus*. Paper prepared for a seminar at the Centre for Environmental Policy, School of Public Affairs, American University, Washington D.C. 5 November 2014. <https://www.american.edu/spa/cep/upload/jonathan-boston-lecture-american-university.pdf>.

The development of long-term administration becomes increasingly important in a world where systemic risks are on the rise, phenomena are more complex and where the current generations have a greater chance than ever to affect the living conditions of future generations. Cross-generational thinking is also at the core of sustainable development.



## 4 In conclusion

This Report on the Future was made in two parts. In accordance with Parliament's report and the current mode of foresight, the Government continues its efforts to strengthen dialogue-type and open work on the future. The two-part report has received positive feedback, and the intention is to continue to be a model supporting open discussion. Many of the proposals in the report are interlinked. When economic and other impact assessments are made, they should be examined as a whole and as part of many other development proposals pertaining to the future of work.

The links between sustainable development and work on the future should be intensified further. The well-received two-part report could be steered in the direction where the report on sustainable development and the report on the future would be compiled in two parts together. For example, a comprehensive report on sustainable development would be made first. It would be followed, as the second part, by a report on the future, which would discuss a theme important for sustainable development in more detail.

The Committee for the Future hoped for a broad, open and pluralistic value debate on the future of work and on what kind of society we want. This would be the way to increase confidence in the future and in making the future together. Long-term decision making is able to respond to this wish, as it increases trust in administration and builds an open society that supports citizens' possibilities to participate in the planning and testing of the goals set for administration.

# Appendices

## APPENDIX 1: Preparation of the Report on the Future

Similar to Part 1 of the Report on the Future, Part 2 was prepared in an open and network-like process between June 2017 and October 2018. Work has been done in workshops, events, discussions and expert meetings. Many thanks to everyone who has participated in and contributed to the work in one way or another.

The authors of the Report on the Future, the experts on the future of work and the contributors to the building of shared understanding:

Prime Minister Juha Sipilä's Government

Part 2 of the report was discussed at the Government strategy session on 21 May and at the negotiations held on 27 September 2018.

Preparation of the report was led by State Secretary Paula Lehtomäki.

Background for Part 2 of the report was provided by VN TEAS Project Tulevaisuuden työn tahtotila

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Economic Council

The report was discussed by the Economic Council on 18 April 2018

Special Advisers Satu Mäki-Lassila and Janika Tikkanen

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Parliament Committee for the Future

National Foresight Network, [www.foresight.fi](http://www.foresight.fi), Foresight Friday events supporting the report, 3.11. and 13.12.2017, 5.4. and 19.4.2018

FinnSight ennakointifoorumi 2017 – Mistä on huomisen työ tehty?

Organised by the Prime Minister's Office, Academy of Finland, Sitra, Tekes, Ministry of Economic Affairs and Employment, Ministry of Education and Culture and the Finnish National Agency for Education

Kohti seuraavaa sataa events in Helsinki 8.12.2017, Oulu 26.2.2018, Turku 12.3.2018, Vaasa 24.4.2018 and Kuopio 14.5.2018

Everyone who has participated in the events and discussions and commented on the drafts of the report

Sources and references appear as footnotes in the text.

## Appendix 2: Proposals in the indicator baskets of sustainable development<sup>64</sup>

Proposals in the indicator baskets of sustainable development	Working life, quality and change	Exclusion, inequality and inclusivity	Education and development of competence
Clarification of the regulation of operations on platforms.			
A long-term strategic vision and goals supporting growth, mobility and labour immigration			
The state and the municipalities to utilise platforms in their own needs for labour			
Each employment relationship to include the possibility of continuous employee development			
Relevance and meaningfulness of work as the key indicator			
Artificial intelligence to help in identifying skills and converting them to be relevant			
Reducing the efforts to steer education by anticipating the need for skills; focusing education more and more on theoretical basic preparedness and metaskills			
Creating a career account or a training voucher for people over the age of 35			
Higher education institutions to provide degree programmes for people in working life			
Graduates' relationship with higher education institutions to last a lifetime			
Studying on the earnings-related unemployment allowance			
A broad debate on social security options			
Incentives not only for paid work, but also more widely for other activities, such as studying and volunteering			
Removing barriers to automating work tasks			
Full utilisation of digitalisation in the junctures of working life			
Directing employment-promoting subsidies towards work that includes interaction and promotes sustainable development			
A versatile perspective on work ability			
Adopting a pluralistic societal perspective on work, a mere competitiveness perspective is not enough			

<sup>64</sup> State of sustainable development, <https://kestavakehitys.fi/en/monitoring>



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