



Session 3

Estonian skills and labour forecasting system OSKA

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This presentation is in 5 segments

- What is OSKA?
- Why did Estonia need OSKA?
- What does OSKA do?
- How does OSKA do what it does?
- What is the future of OSKA?



What is OSKA ?

OSKA helps to learn and teach the right skills

OSKA analyses the needs for labour and skills necessary for Estonia's economic development over the next 10 years



OSKA = anticipation and monitoring system for labour and skills demand

- How many people and which skills are needed in our labour market today and tomorrow?
- Where and how to acquire those skills?
- What should be changed today's to meet the future needs?



Why did Estonia need OSKA



Need to establish a skills anticipation system

- **Lack of qualified labour force** named as the main hindering factor of growth by Estonian entrepreneurs
- Rapidly **aging society** and **declining working age population** (2015-2040 forecasted decline of 20-64 population by 12% and growth of 65+ population by 32%)
- 51% of jobs at high **risk of automation** in Estonia (S. Sikkut 2015/Frey-Osborne 2013)
 - Or: 46% of jobs at risk of automation (McKinsey 2017) / 12% (OECD 2016)
- **High skills mismatch** due to rapid changes in the society during the last 25 years (after gaining independence from Soviet Union)

Policy problem: lack of skilled labour force

- The **proportions of graduates** from different fields of education not in line with job opportunities
- Need for a **common platform** to connect education system and economy/entrepreneurs
- **Curricula** are not always up-to-date and streamlined with the needs of society and economy
- **Public Employment Service** lacks foresight of labour and skills needs by sector and occupation
- Need for evidence-based **migration** policy

What does OSKA do



ОСКА импаџтс тхе баланџе оф скилл
леарнинг анд тхе неед оф скиллс ин
тхе лабоур форџе

*A source for planing changes to study programmes
in vocational and higher education*

*Amount of programmes, number of
students and content*

*Government project to popularize needed
occupations*

For digital up-skilling workers project

For student and adult educational counseling

Informing the public about vise educational choices

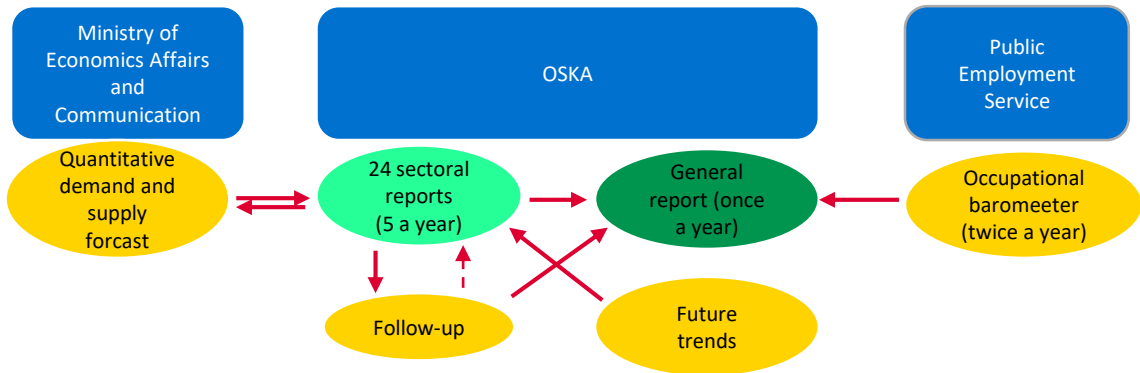


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How does OSKA do what it does



General forecast model of Estonia



OSKA uses sectorial surveys as lego buildingblocks to construct the overall view of skill need in Estonia

- Reports on 5 economic sectors every year in 5-6 year cycles
- Similar methodology applied to all sectors – **comparable results**
- Forecast horizon 5-10 years
- Once a year a general overview of labour demands and education



Survey process

OSKA survey team

Literature, statistics, policy documents
Interviews (sector, policy makers)
Establishing experts panel

Interviews (sector)
Preliminary labour forecast
Analysis of skills needs

Interviews (education)
Calculation of supply
Preliminary table of demand and supply

Drawing conclusions, forming preliminary
proposals and suggestions to meet
mismatches

Compiling survey report

Experts panel workshops

1. Sector and occupations,
statistics, trends

2. Labour forecast, growing
skills needs

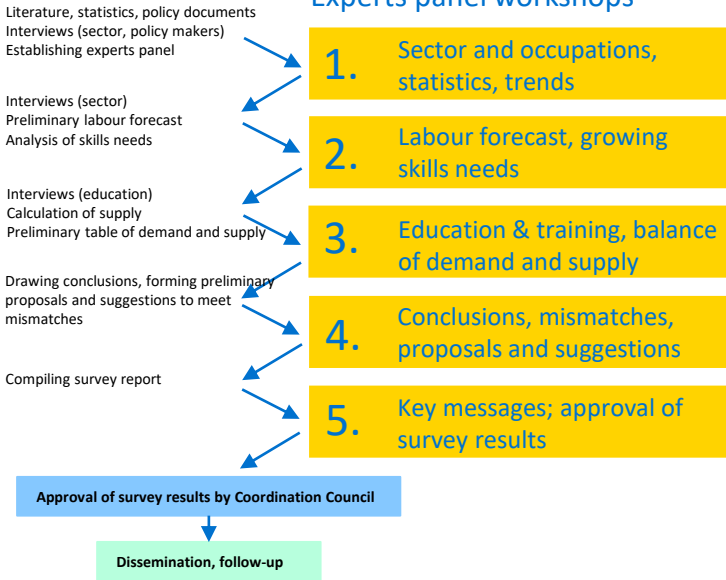
3. Education & training, balance
of demand and supply

4. Conclusions, mismatches,
proposals and suggestions

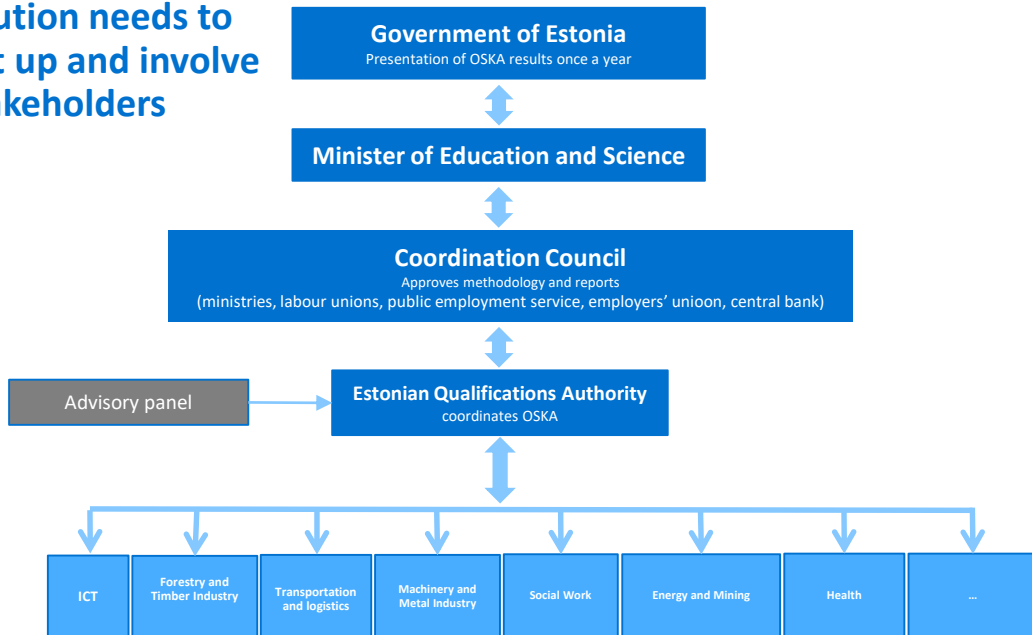
5. Key messages; approval of
survey results

Approval of survey results by Coordination Council

Dissemination, follow-up



**Institution needs to
be set up and involve
all stakeholders**



Strenghts

- Strong **cooperation** with policy makers and stakeholders
- Clear aim and agreement to **support policy making**
- **Qualitative** and **quantitative** methods
- **General** forecast model and **sectoral** surveys



Has OSKA succeeded?

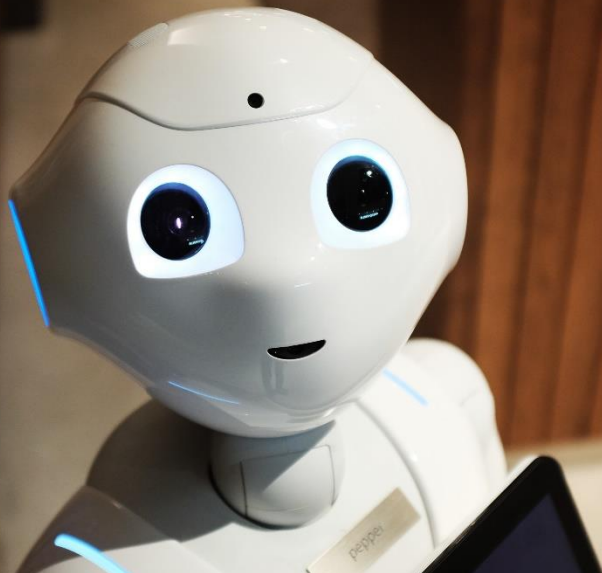
OSKA has become a known, **recognized and used by target groups**

- OSKA intelligence is **used in policy-making**
- Ministry of Education and Research elected OSKA as the **best new project in 2016**
- OSKA sectoral reports were nominated for a public **Clear Message Prize** in 2017
- Estonian Public Employment Service nominated Kutsekoda as **partner of the year** in 2017 for establishing OSKA programme

Use of results: lessons learned

- Continuous cooperation with users is inevitable
- Understand the needs of your users
- Make a step towards your users
- Try to link to user's systems, frameworks and terminology
- Never-ending process
- Impossible to meet all needs and expectations

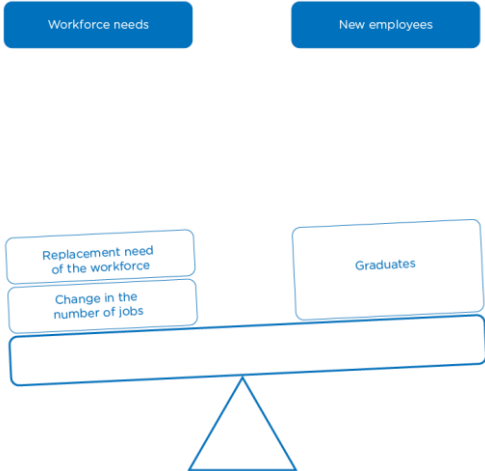
What is the future of OSKA



- Change of methodology to include more data sources to provide a more detailed analysis for better policy making
- Creating a classification of skills and competences (Not ESCO)
 - Adopting the classification as the basis of OSKA analysis, occupational qualifications, study programme outputs etc
- Using web crawling to find more data about skills and skills needs

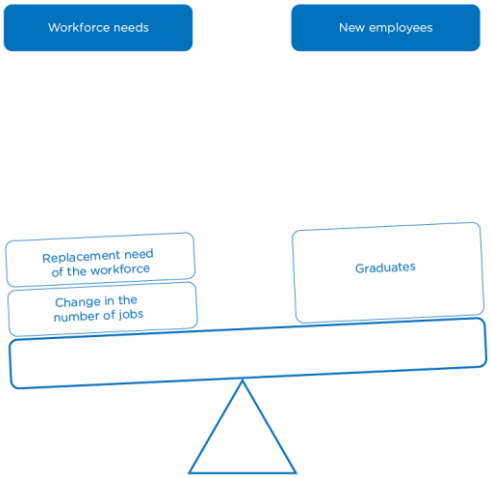
Simplified quantitative analysis model in the first round of OSKA and planed model for the future

OSKA 2015-2020

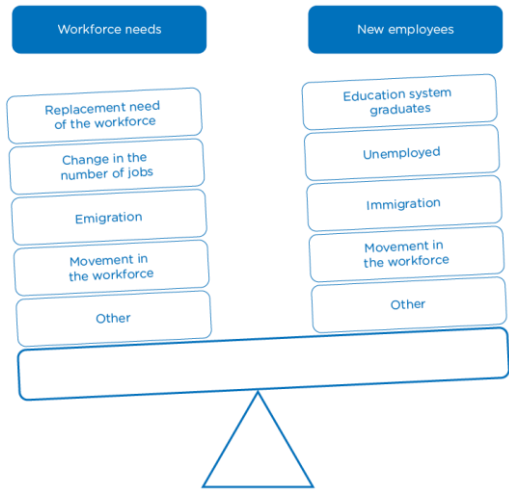


Simplified quantitative analysis model in the first round of OSKA and planed model for the future

OSKA 2015-2020



OSKA 2020+



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