THE FUTURE OF WORK: WHAT SKILLS DO WE NEED, AND HOW DO WE PROVIDE THEM?

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Future of work: key issues

- Digitalised economy (productivity and jobs)
- Digitalised society (inequality and other risks)
- Public policy agenda
- Territorial dimension
Automated restaurant (Budapest, 1898)
EU policy: challenges and initiatives

• The key challenges for social regulation:
  • Employment – the risk of job displacement and the need for requalification (new skills)
  • Working conditions – the risk of insecurity and precariousness
  • Social protection – the risk of staying out of the welfare system + income inequality

• Main EU initiatives (2016-2017)
  • Consultation on the European Pillar of Social Rights (+EP Report by MJR)
  • New EU Skills Agenda
  • Occupational Health and Safety: musculoskeletal disorders

• Analysis: The Future of Work - Skills and Resilience for a World of Change by EPSC (June 2016); using ILO, OECD and CEDEFOP studies
Does policy need a paradigm shift?

**Regulation:** Flexibility with security
- Providing better guidance on how to classify workers
- Reducing incentives to take up new forms of work
- A better balance in burden of proof of work status
- Ensuring fair pay for work

**Social protection:** Repair or replace?
- Effective access to social protection for self-employed
  - 55% The share of self-employed (15-64) in the EU at risk of not being entitled to unemployment benefits
  - 38% The share of self-employed (15-64) in the EU at risk of not being entitled to sickness benefits
  - 46% The share of self-employed women (15-49) in the EU at risk of not being entitled to maternity benefits

**Social dialogue:** Strengthen or reinvent?
- Trade union members (as a % of all employees)

**Lifelong learning:** from rhetoric to reality
- Participation rate job-related training (%)

Source: Training data from European Adult Education Survey; Social protection coverage from Access to social protection for people working on non-standard contracts and as self-employed in Europe: A study of national policies 2017; and trade union data from OECD Employment Outlook 2017.
digital agenda

youth on the move

innovation union

new industrial policy

new skills & jobs

platform against poverty

resource efficiency
Programing skills

Training enterprise

EU support?
CODECOOL

Overview:
- Programming Basics
- Target Tech. Basics
- Advanced
- Internship, Modules

Technologies:
- Python
- Java or C#
- Spring, Android, full stack web, ...
- Company specific coaching

Software Theory:
- OS
- OOP
- Services
- Shell and CMD
- Memory
- UI/UX
- SOLID
- Processes
- I/O. Cache
- Requirement engineering
- Design Patterns
- i18n
- Networks
- Performance
- Security
- UML
- Pair Programming
- Requirement engineering
- Agile
- TDD
- Version Control
- Testability
- Project approach
- XML
- BDD
- DB
- JSON
- Company specific

Misc. Techs and methodologies:
- Communication
- Team Work
- Problem Solving
- Business oriented thinking
- Adaptability
Future of work – skills panorama

- Karen Gregory (Edinburgh Futures Institute)

  The “Future of Work” is not solely the “business school’s” concern, nor is it solely a technical issue. Interdisciplinary, Trans-disciplinary teams.

  The role of the social sciences is fundamental, if we are going to understand issues of inequality, social & racial justice, adaptation & adoption of new technologies, social cohesion.

  Reimagining the curriculum:
  - Value and Values
  - Creative, Critical Design Thinking
  - Policy and Public Tech
  - Engagement in Industry and Beyond
OECD: Hungary’s Skills Assessment and Anticipation System

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<tr>
<th>Assessment and Anticipation of Skill Needs</th>
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<td><strong>Different skills assessment and anticipation exercises</strong> exist at various levels of aggregation</td>
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<td>Every year, <strong>questionnaires sent to 8 000 firms</strong> and complemented with qualitative sources</td>
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<th>Use of Skill Needs information</th>
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<td><strong>Widely used in the context of VET programmes by the Ministry of Education to address the challenges related to skills mismatch and shortages</strong></td>
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<td><strong>Update qualifications and curricula</strong> as well to develop Hungarian <strong>apprenticeship system</strong></td>
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<th>Stakeholders collaboration</th>
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<td><strong>Cross-ministerial collaboration</strong> takes place through advisory bodies (e.g. national body for VET qualifications with experts from ministries, economic sectors, associations, etc.)</td>
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<td><strong>Collaboration across different administrative levels</strong> seems to work well</td>
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A broader strategy to facilitate labour market adjustment

- Anticipating skill needs
- Adequate income support
- Local development policies
- Better framework policies for mobility
- Fostering innovation
- More "social" trade policies
Bringing in the regional dimension

Skills supply and demand by region, 2013

Note: Skills supply is measured by the percentage of people with post-secondary education and skills demand is measured by the percentage of medium- and high-skilled occupations and Gross Value Added per worker.
Source: OECD, Job Creation and Local Economic Development 2016.
Conclusions

- New forms of employment require a new skills strategy (+ review of EU social acquis)
- Investment in new skills requires (joint) public and private effort
- EU can use three arms of governance to tackle "future of work" related challenges: legislation, policy coordination and fiscal capacity (budget)
- Concerns about income distribution and social security must be addressed, together with impact on territorial imbalances
- Social dialogue must play a role in analysis, decision making and implementation at all levels
Thank you for your attention!