

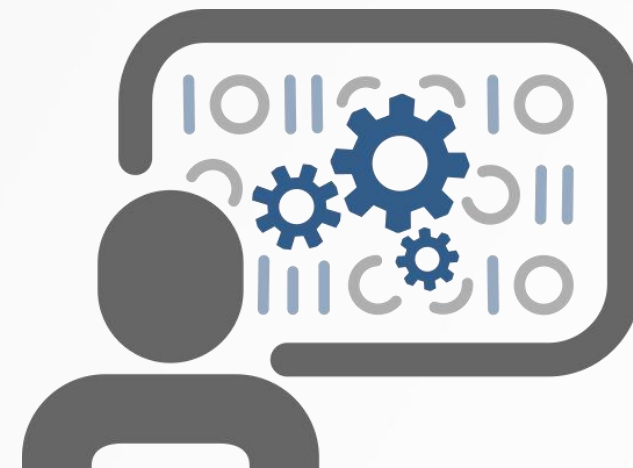
Digitisation and work:

How governments are responding to changing labour markets.

Seminar Work 4.0 | 28 February 2018

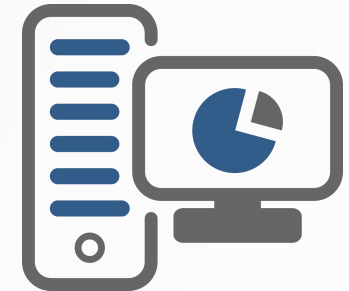
Content

- Digitalisation in the context of labour markets
 - Technological Developments
 - Impact on work
- Impacts beyond work
 - Education & Training
 - Finance & Taxation
 - Social & Cultural
- Policy plans and governmental responses
 - Longer term plans
 - Specific policies
- Conclusions / Considerations



Digitalisation | Technological Developments

- New generation of technological developments
"The fourth industrial revolution" / "Second digital Age"
 - What's different?
 - Increasing speed of technological change,
 - Technological changes are interacting strongly with societies,
 - It seems certain that big (societal) changes are underway.
- Policy makers (and governments in general) need to closely monitor technological developments and anticipate its consequences.



Digitalisation | Impact on work

- Studies / publications differ widely in their assessment of the impact of digitalisation on work. However:
 - Majority of views suggest profound impacts and influencing many policy areas. Positive impacts in one area could easily be offset by negative in others.
- Three different types of impact labour markets:
 - Loss of jobs through automation,
 - Shift in working arrangements (AWA),
 - Creation of jobs.



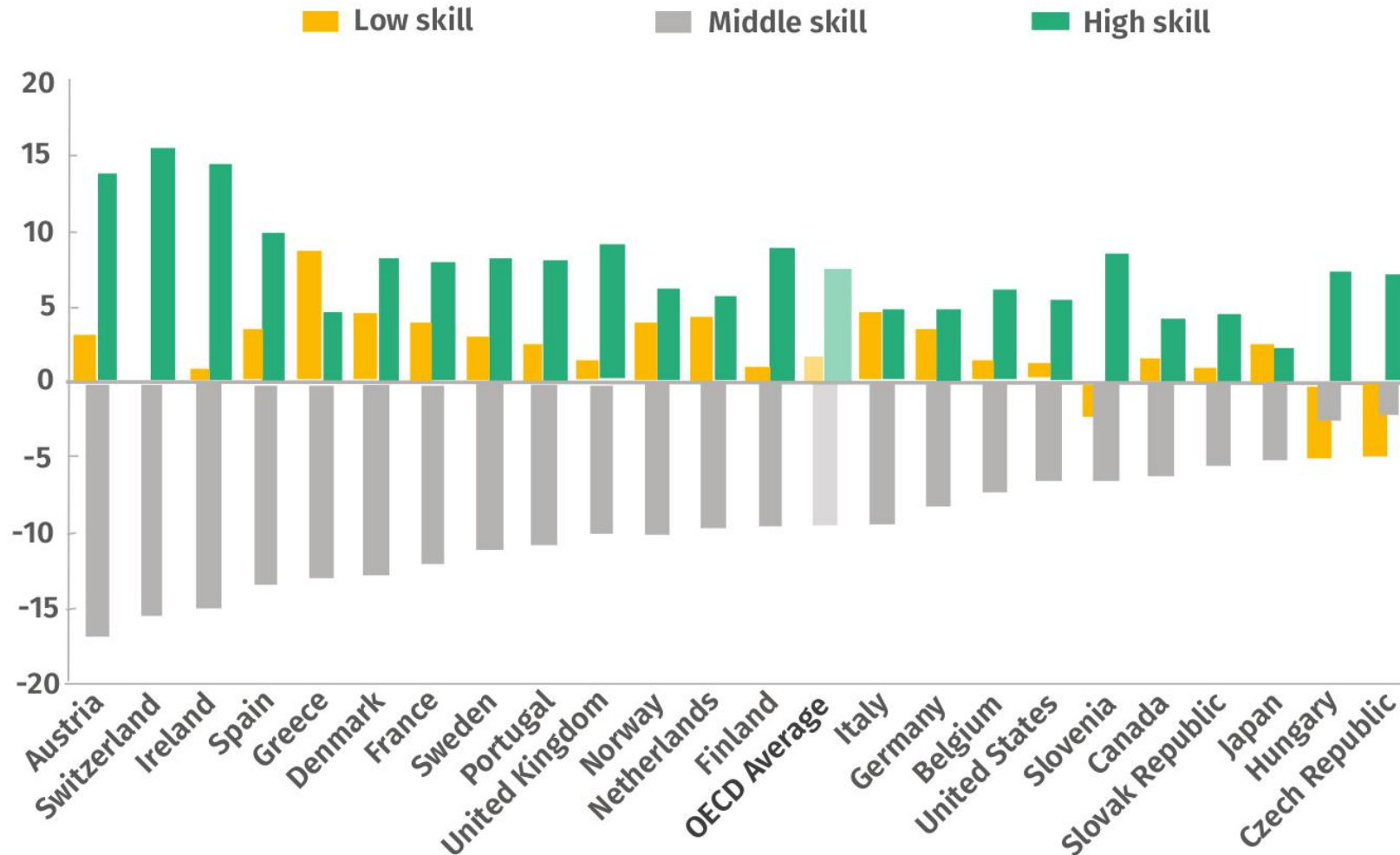
Digitalisation | Impact on work | Job loss

- Estimates of the number of jobs lost vary strongly, consensus is jobs will be (increasingly) lost.
- Focus should be on ‘tasks’ rather than “jobs”:
 - Jobs disappear because tasks are automated.
 - Most jobs have automatable tasks. Leading to a) increase productivity for some, b) job loss due to positions merged, c) more people in AWA
- Jobs and/or tasks that are least at risk are those:
 - a) not cost-effective to automate.
 - b) difficult to automate; (non-repetitive, complex, ambiguous).
 - Related to "the shrinking middle" & "the great decoupling".

→ Keep monitoring the developments to assess the likely degree of job loss and create flexible policy scenarios.

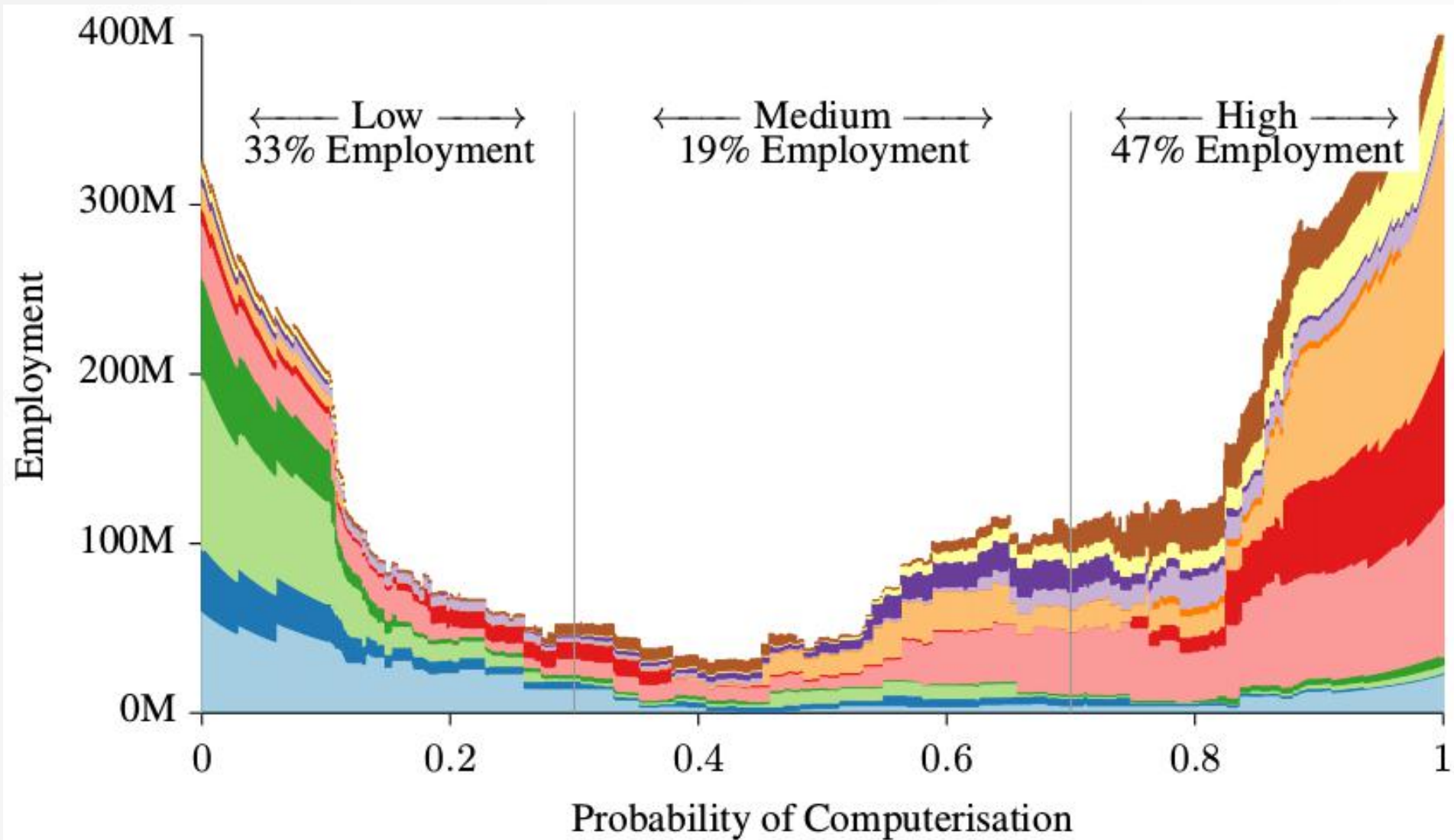
Digitalisation | Impact on work

Job polarisation has occurred across the OECD in recent decades
Percentage point change in share of total employment, 1995–2015



Source: OECD 2017

Digitalisation | Impact on work



Digitalisation | Impact on work | AWA & Creation

- More so than job loss, more people will likely end up in AWA:
 - Longer ongoing trend of AWA
 - Trend is expected to continue due to automation, ↑AWA
 - Could have (underestimated) consequences in terms of workers' social security, benefits, and self-esteem.
- Assess the longer term consequences of AWA and create "AWA ready" policies
- Automation will lead to job creation:
 - More jobs in existing categories,
 - New types of job categories.
 - Most (new/future) jobs require different skills.
- Educational reform is needed for future job creation

Impacts beyond work

- Education & training:
 1. Shift from traditional knowledge education to skills that fit the future.
 2. Focus on life-long learning, (constant) changing jobs & skill requirements.
→ Focus on a) human literacy skills, b) experiential learning, c) life-long learning mindset & d) digital skills. STEM education.
- Finance & taxation:
 1. Lower labour taxes, higher financial inequality, lower consumption.
 2. More job loss or AWA. More people benefits and/or in education.
→ How can we keep the current (governmental) financial system sustainable?
- Social & cultural
 1. Potentially greater and increasing social inequality.
→ How can we maintain an inclusive society?

Policy plans

General status:

- No single country has broad ranging plans that encompass all relevant policy areas. In most countries:
 - longer term plans are under development (e.g. DE),
 - in earlier stages (e.g. UK, CZ),
 - non-existent (e.g. most EU countries).
- When countries are developing broader plans regarding automation, focus is on economic aspects of automation, mostly:
 - How the economy can remain competitive, and
 - What is required from the labour market to satisfy that goal.



Policy plans

Several countries are developing targeted policies to address some of the challenges. Most are aimed at

- a) stimulating life-long learning and/or education in general,
- b) legal and ethical rules for robots, and
- c) some thinking about the financial aspects of robotisation such as a robot tax and/or universal basic income.

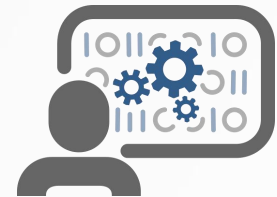


Social reform appears to be lower on the agenda and it appears not many countries are developing (social) policies at all.

→ Countries should start focusing more on the broader implications of automation rather than the more economic aspects.

Conclusions / considerations

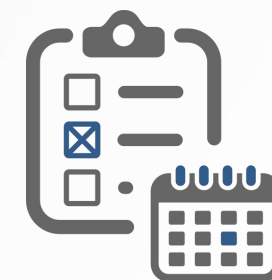
1. Technological developments are going increasingly fast and could severely disrupt societies. Impact is not just on labour markets, but wide range of areas.
 - Closely monitor/predict technological developments, learn, and anticipate consequences.
 - Develop (potential) policies in conjunction with other policy areas.
2. The impacts on the labour market are highly uncertain. Jobs might disappear, more people will likely end up in AWA and new jobs will likely be created.
 - Monitor/forecast specifically the developments in the labour market.
 - Develop AWA focused policies and educational reform.



Conclusions / considerations

3. Technological change will impact adjacent policy areas; a) education, b) finance & c) social.
 - Reform education to target different skill sets (↓ knowledge oriented)
 - Develop different taxation models and income (tax) reform
 - Guard social inclusion (maintaining equality and self-worth)

4. Policies / plans are underdeveloped across the EU. Most policy plans and developments target the economic aspects.
 - Need to broaden our scope and think about the impacts of technology on society as a whole.
 - Start developing different policy options for the future (asap) to be prepared for various scenarios.



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