

Tasks, Requirements, Job Quality: How AI is changing work in Austrian companies

Qualitative insights from OECD case studies
on digitalization with a focus on Austria.



KMU
FORSCHUNG

Study Design & Background

Part of the OECD research project: 'The Impact of AI on the Workplace'



Data Basis

52 Qualitative interviews
conducted in Austria
between July 2021 –
March 2022



Target Sectors

Manufacturing,
Finance, and Energy



Stakeholders

Management, AI
Implementation
Managers, Workers,
and Works Councils

Motivation of companies to implement AI



Competitiveness

Primary driver is the fear of being left behind.



Process Quality (Error Reduction)

Efficiency increases and error reduction are at the forefront.



Skilled Labor Shortage

AI as a strategy to counteract the shortage of qualified personnel, not primarily to reduce staff.

Overall Expectation: Productivity increases are awaited through automation. Cost-cutting is rarely the sole stated motivation

Shift of tasks

Before



Routine Tasks

After



Complex Tasks &
Social Interaction

Repetitive tasks are automated, complex tasks expand

Impact on Employment levels

- No reports of mass layoffs due to AI in any of the firms studied
- Restructuring:
 - staff is sometimes redeployed in shortage areas
 - decrease in clerical/manual roles; increase in AI/Data Science-roles



⇒ AI prevents hiring new employees, rather than firing existing ones

Employment Mechanisms: Why AI has not (yet) resulted in layoffs

① Task substitution without job substitution

Pharma: image recognition AI

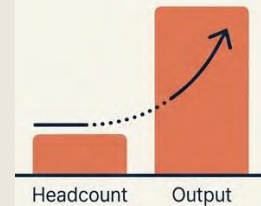
AI replaced one single task in a multi-task job.

'[The AI] removes one task of many that contributes to the mental load of an assembly line worker. Because this [task is one of many], automating it alone does not enable worker replacement.'

② Headcount growth slows

Manufacturing

Digitisation decouples output growth from hiring.



'The increase in sales no longer has to go hand in hand with an increase in the number of employees. Digitisation processes make it possible to partially break away from this existing correlation.'

③ Human fallback as transitional buffer

Insurance: AI-based document indexing

Manual indexing skills kept in-house as a safety net while AI proves itself. **Workforce retained as long as confidence in AI is low.**

'The longer [the technology] runs stably, the more confidence [we will] have in the system and the less the manual (human) backup will be necessary.'

The Age Divide



Younger workers are more tech-savvy; view AI as an opportunity



Older workers (50+) more sceptical
„never change a running system“

Experienced workers in the manufacturing sector often see AI as a rival to their years of intuition *„What can the machine do that I cannot?“*

Changes in Skill Requirements

- **Growing demand for new skills**
 - **Analytical thinking & problem-solving:** Interpreting AI outputs, addressing unexpected issues.
 - **Digital literacy & AI-specific knowledge:** Understanding AI systems, data handling.
 - **Socio-emotional competencies:** Communication, collaboration, critical thinking, creativity become more crucial.
- **Upskilling & Reskilling Initiatives**
 - Importance of continuous learning, especially AI-literacy.
 - Retraining for new roles within the firm is essential.



Work Quality: Safer, less boring, but more intense



Improvements

- Less tedium - routine tasks automated away → more time for meaningful work
- Reduced workload pressure (esp. in finance)
- Increase in physical safety (in manufacturing)

Challenges

- Increased work intensity - loss of ‚mental breaks‘ due to more complex and demanding tasks
- Psychological burden: system distrust & surveillance



Social Partnership: The role of work councils

Involvement

Core Design



Implementation/UX

Rather late and mostly
only informed



The Knowledge Gap



Councils often lack the
technical know-how to
effectively oversee AI
projects

Conditional Trust



Supportive, as long as...

- 1) AI reduces workload
- 2) No layoffs occur
- 3) GDPR is strictly respected.

Summary of Findings & Key Takeaways

- 1 **Shift / reorganisation of tasks**
- 2 **No immediate job losses** but slower job growth expected
- 3 **Older workers face higher adoption hurdles:** targeted support needed
- 4 **Growing demand for new skills:** urgent need for data literacy at all educational levels
- 5 **Job quality can improve** (less tedium/dangerous) but risk of higher work density
- 6 **Works councils need technical empowerment** to effectively oversee AI projects



Access the full paper for more detailed results:

Milanez, A. (2023). *The impact of AI on the workplace: Evidence from OECD case studies of AI implementation* (OECD Social, Employment and Migration Working Papers No. 289; DELSA/ELSA/WD/SEM(2023)7).

Organisation for Economic Co-operation and Development.

<https://dx.doi.org/10.1787/2247ce58-en>

Thank you for your
attention!

KARIN PETZLBERGER
k.petzlberger@kmuforschung.ac.at