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The story of a happy marriage: What the Learning Capacity of Organizations can do for Job-Skills Matching

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BRIDGES 5.0's central argument

Technology is accelerating. Workers are not benefiting.

European firms are digitising faster than ever, yet working conditions across the EU27 have deteriorated, with only tentative signs of improvement since 2024 (EWCS, Eurofound).

The standard policy response makes things worse.

Current industrial policy, including the Competitiveness Compass, overwhelmingly subsidises technology adoption. But if technology alone isn't delivering *human-centred outcomes*, more of the same won't fix it.

The decisive variable isn't which technologies firms adopt. It's whether firms can learn alongside them.

We call this the ***Learning Capacity of Organisations*** (LCO) and we argue that is the key to a productive relationship between firms and workers.

The secret of a happy marriage

Making EU firms thrive through digital transformation without leaving workers behind is one of the great challenges of our time. It is, in many ways, like a marriage.

A strong couple doesn't grow by keeping each other in the dark. They build a life together: sharing experiences, facing challenges side by side, and creating something neither could achieve alone. Firms that invest in producing new knowledge work the same way. They don't just accumulate expertise, they bring workers along for the journey, actively nurturing the emergence of new skills rather than letting them become obsolete.

When employees are genuine participants in creating knowledge, not passive recipients of decisions made above their heads, they become more adaptable, more resilient, and better prepared for the inevitable disruptions ahead. In short: the firms most likely to flourish are those that treat their workers as partners, not passengers.

Something old, something new, something borrowed

The old is the recognition, as old as industrial capitalism itself, that technology affects work. Current digital transformation can result in an accrued long-lasting **skills mismatch** and will also require a massive **reorientation of the education system** (Cedefop, 2023).

The new is the **Industry 5.0 framework's** insistence that the impact of technology on work must be evaluated against the *social standard* of human flourishing, environmental sustainability, and systemic resilience, not merely against the *industrial standard* of short-term productivity.

The borrowed is the **measurement architecture** we have assembled to verify our hypothesis (notably that many EU firms are already good spouses): instruments designed for other purposes, repurposed with methodological care, and triangulated across national and sectoral contexts to extract insight that no single source could yield alone.

The spouses

Belonging to different religions, bringing them together requires substantial cultural mediation.

On one side: **firms** operating under constant competitiveness pressure.

They know that staying competitive requires innovation and successful digital transformation. They are acutely aware of the threats posed by talent turnover and skilled-labor shortages.

On the other: **workers**, current and future, who feel threatened by technology.

They need to acquire new knowledge and increasingly feel the need to find meaning in their work.

In an **Industry 4.0** marriage, firms focus solely on productivity and profitability, offloading the burden of skills change entirely onto workers.

In an **Industry 5.0** marriage, firms and workers collaborate to mutually grow their knowledge and productivity. The firm learns too, and the cognitive dimensions of workers are preserved.

The vow – the Learning Capacity of Organizations

Our hypothesis is that many firms are already doing what they should: they are in a 5.0 marriage, even if they have no idea what this means.

- This is because many EU firms understand that inserting technology into their production process is not sufficient to achieve a successful technological transformation.
- Organizations make strategic choices to expand their **productive knowledge** and innovate. In doing so, they can move toward an Industry 5.0 scenario... or not.
- We argue that **Industry 5.0 organizations are those that commit to Learning.** Firms learn for themselves, with workers, and for workers. Workers learn for themselves, with the firm, and for the firm. In this way, firms secure successful innovation, and workers are shielded from having to exogenously adjust their skills to keep their jobs.

The vow – the Learning Capacity of Organizations

Dimension	Description
Cognitive dimension of work	Workers solve unforeseen problems, perform complex tasks, and learn new things
Training opportunities	Workers receive on-the-job training to improve skills
Cognitive autonomy	Workers assess their own work quality and apply their own ideas
Organizational motivation	Employees agree that the organization motivates workers
Autonomous teamwork	Team members decide task division, team leadership, and timetable
Social support	Colleagues and management provide help and support
Supportive supervision	Supervisors provide feedback, respect workers, and resolve conflicts effectively
Direct participation	Workers influence choice of partners, targets, work processes, and decisions

The officiants – CEDEFOP and Eurofound

CEDEFOP and Eurofound asked exactly the right questions to our two protagonists, and thanks to these data we were able to test our hypothesis at the EU level.

- The ECS (CEDEFOP-Eurofound 2019) allowed us to compute the Learning Capacity of Organizations for firms across the EU and to measure their level of technological adoption and innovativeness.
- The ESJS (CEDEFOP 2021) allowed us to observe what is happening to the skills of EU workers.

Because they belong to different religious traditions (the ECS is a firm-level survey; the ESJS is an employee-level survey), communication between these two data sources can only take place in the middle ground.

How do we do that?

We merge the two sources at the meso-level of industries (NACE Rev. 2, 2-digit level) within countries. **Coverage:** enterprises with more than 10 employees in 68 industries (NACE Rev. 2, sections B–N) across EU-27 (ECS) and their employees (ESJS).

The witnesses

The Learning capacity of the Organisation is the secret ingredient of a happy marriage, but we all know it takes more than one ingredient.

Our analysis highlights several other factors that contribute to success:

- R&D expenditure,
- the adoption of digital technologies, and
- broader (product, process, organisational and marketing) innovation efforts.

A thriving partnership, it turns out, requires the full recipe.

The first baby : LC brings innovation

What ultimately this happy marriage can deliver is not just at the profit of firms, but at the profit of the society. When organisations learn, they deliver innovation and better outcomes for workers in terms of skill matching.

All knowledge inputs have a positive impact on innovation

Learning capacity of the organization, R&D expenditure and digital technology adoption are all powerful driver of all innovation types.

The second baby: LC reduces skills disruption

Digital technologies: no direct effect on skill mismatches

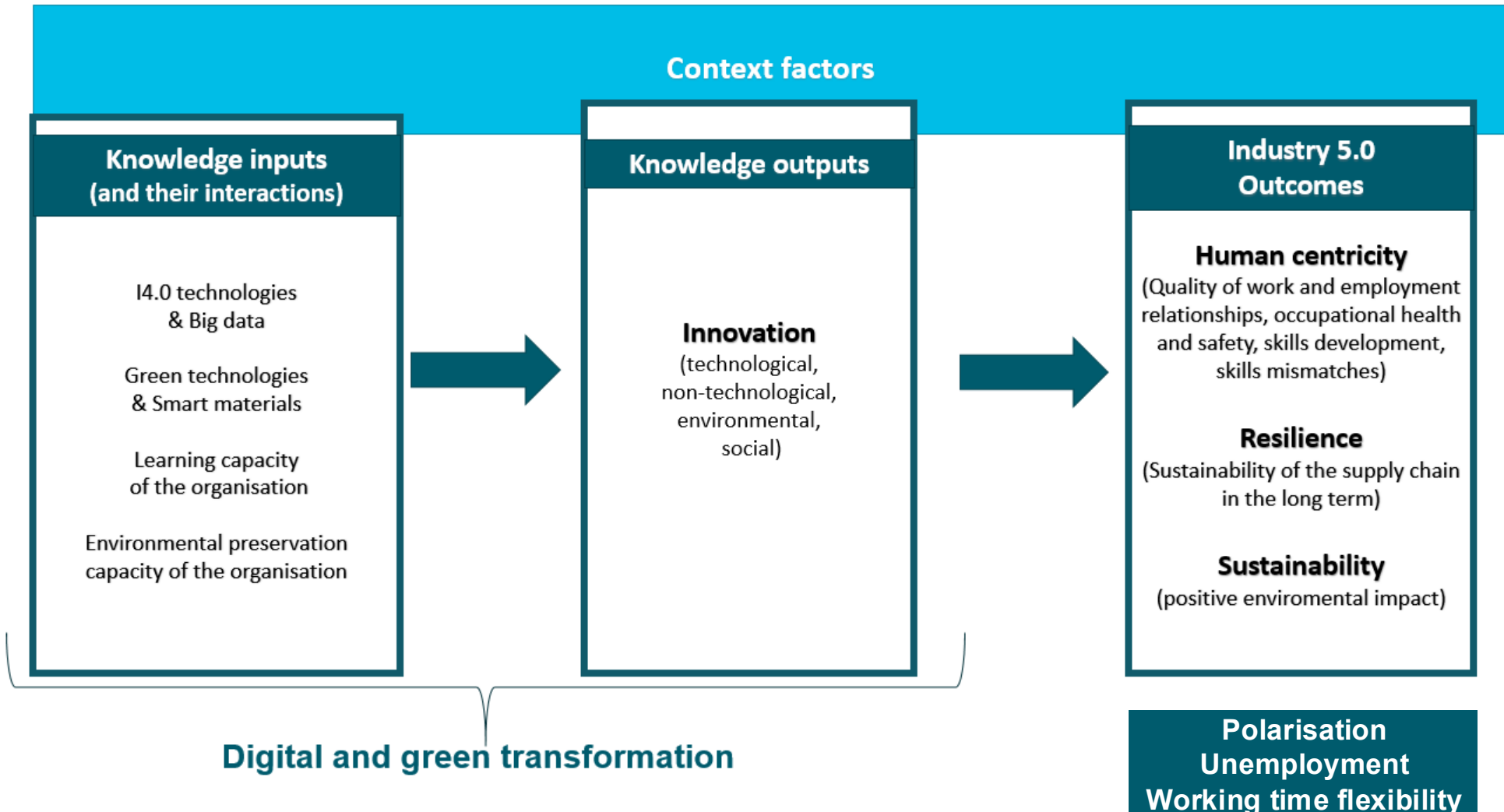
R&D engagement: contrasting effects, positive for white-collar workers, negative for blue-collar workers

Learning capacity: strong positive effect on both groups, but stronger for blue-collar workers

In particular:

- Reduces skills underutilization
- Lowers real overqualification
- Increases education underqualification (positive adaptation)

The social impact of the happy marriage





**Thank you for your
attention!**



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