

# Enhancing Job Quality in the Digital Age



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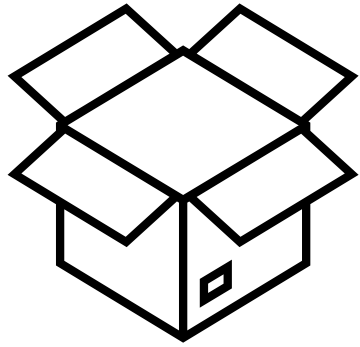
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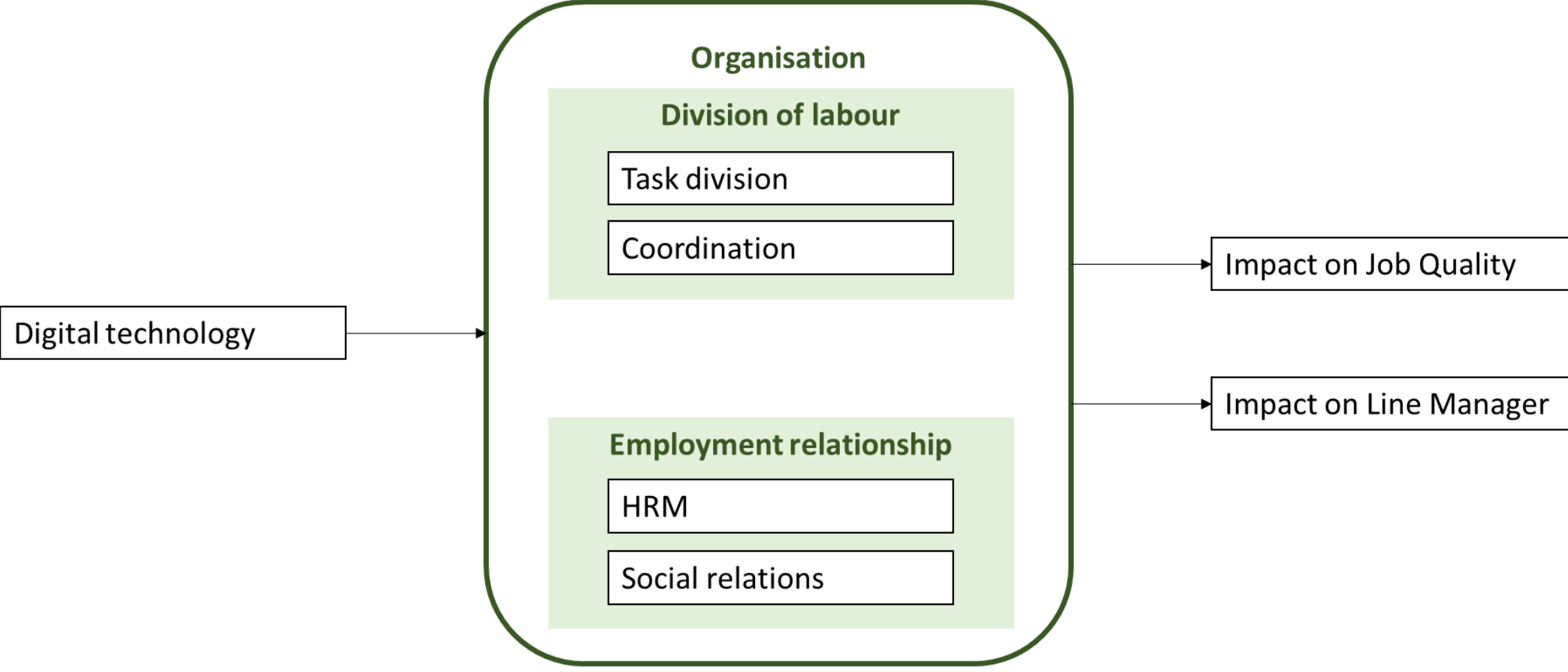
# SEAD

Sustainable employment in the age of digitalisation

<https://sead.be/>



# “Unpacking the organisational level”

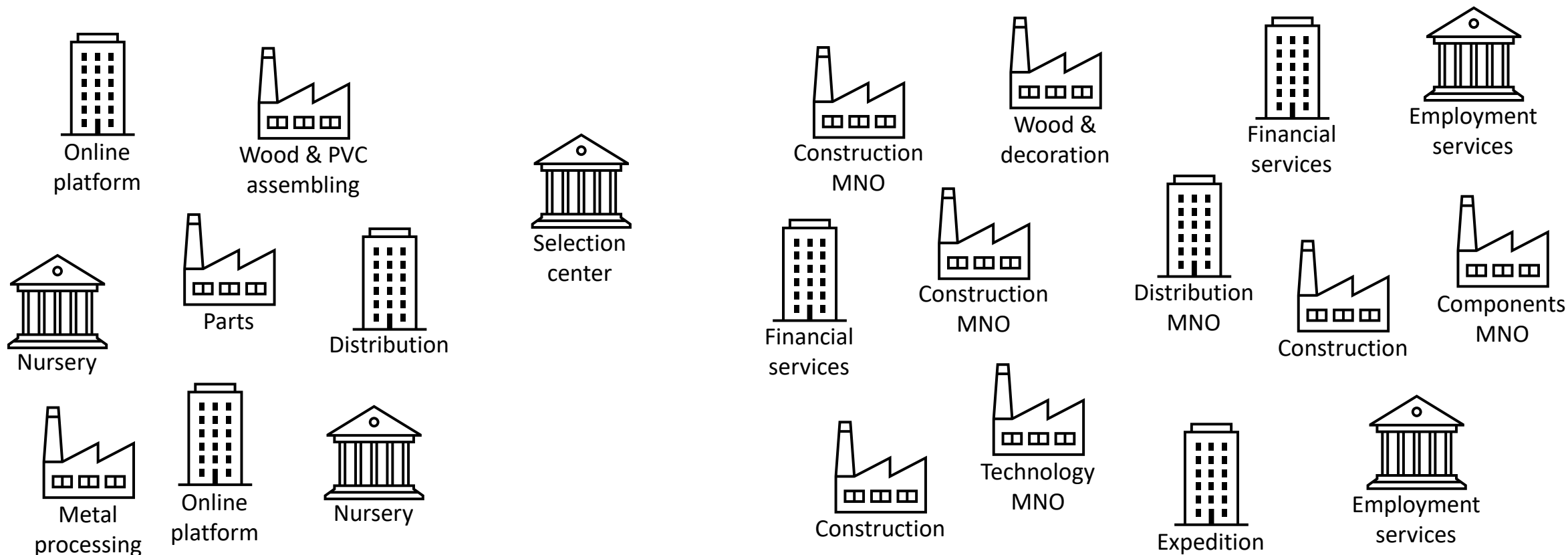


# 22 Belgian cases, from services 🏢 , industry 🏭 , and public 🏛️ sector

10 - 50 employees

50 - 250 employees

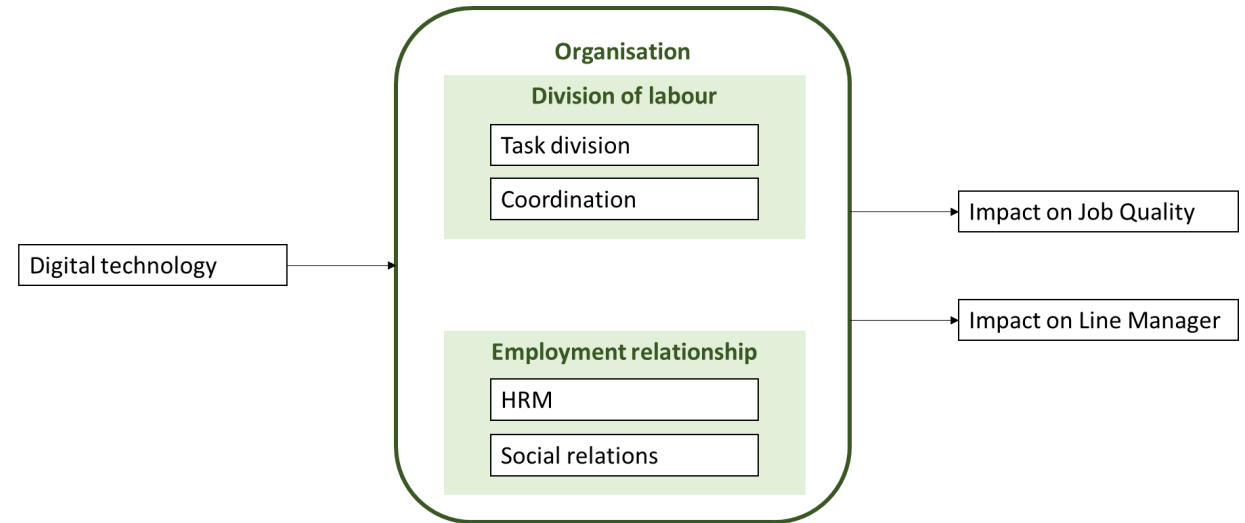
> 250 employees



CASE	2	3	10	17	21	18	20	4	6	19	5	7	16	15	8	1	14	11a	11b	13	9	12
Sector	man	man	man	man	man	man	man	man	man	man	tert	tert	tert	tert	tert	tert	tert	publ	publ	publ	publ	publ
Industry	wood	const	const	const	const	tech	mach	mach	wood	met	forw	fin	fin	distr	distr	platf	platf	work	work	work	nur	nur
Size	L	L	L	L	L	L	L	S	S	S	L	L	L	L	S	S	S	L	L	M	S	S
Origin	B	MNE	MNE	B	B	MNE	MNE	B	B	B	MNE	B	B	MNE	B	B	B	B	B	B	B	B
NT process	X	X	X	X		X	X	X		X	X	X	X	X		X	X					
NT tracking	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NT support	X	X	X	X	X	X	X		X		X	X	X	X		X	X	X	X	X	X	X
NT comm.	o	o	o	X		X	X		X			X	X	X		X	X		X	X	X	X
NT Integr	o	o	o		X		X			X					o	X	X	o	X	X	o	o
NT intro	+	++	+	++	++	+	++	++	+	+	++	++	+	+	++	++	+	+	++	+	+	+
NT disrupt	x	x	x			x		x	o		x	x	o		x		x	x	x	x	x	x
NT resist	o		x	x	x	x	x	x	o	x		x	o		o		o	o		x	x	x
IT position	C	c	c	c	c	D	c	c	c	c	E	c	c	c	c	D	D	E	E	c	E	C
TD orig	H	H	H	H	M	H	M	H	M	M	H	M	M	M	H	M	L	M	M	L	L	M
TD after	down	up	up	=	=	down	down	up	up	up	up	down	up	down	up	down	up	down	up	=	up	=
Org by NT	flow				flow	flow	flow	plan				flow			plan							
Centralis	M	M	H	H	M	M	M	M	M	M	H	M	M	M	M	M	M	M	M	M	M	M
Cent after	down	up	up	=	=	+/-	up	up	=	up	up	=	=	+/-	up	=	=	+/-	up	=	up	=
Standardis.	o	x	x	o	x	x	o	x	x	x	x	x	x	x	x	o	o	o	x	o	x	o
HR recruit	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	(x)	x	x	x	x	x
HR substit	x		x	x	x	x	x			x	x	x	x					x	x	x		
Turnover			H			H	H	H			H	H		H	H			H	H		H	
HR training	i	x	x	o	x	i	i		x	i	x	i	i	i	o	x	o	o	x		x	i
HR discipl	o	x	x	x		x	(x)	x	o	x	x	(x)	x	x	x		(x)		x	X		
eval data	o	x	x	x		x	o	x	o		o		x	x	o	x	o		x	x		o
HR flex					x	x	x	x		x			x	x	x	x	x	x	x			
Soc dial		o	x	x!	(x)	x!	o	o	o	o	(x)	(x)	x	x!	o	o	o	o	(x)	o	o	o
Emp info	x	o	o	o	o	x	x	x	x	x	o	o	o	o	(x)	x	(x)	(x)	o	o	(x)	x
Emp cons	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	o	o	o	x	x
Line bypass	X	X	X	o	o	X	o	(X)	(X)	o	X	o	X	X	o	X	o	o	o	o	X	o
L support	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X
L coach	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	o		X	X	X	X	X
L workload	down	up	up		up	up	up	down	down	up	up		down		up	up	down	up	up	up	up	up
E autonom	up		down		down	down	up	down	down	down	down		up	down	up	up		up+d	down	up	up	
E variation		up			rot	down		down		down	down	up	up	up	rot	up	up		up	up	up	
E support	up				down	up+d	up	up			down		up	up	up	down	up			down	down	up
E workload		up	up	down	down	up+d	up	down	up	down	down				up	up	up		up	up	up+d	down
E phys str				down	down	down	down	down		down	down											
E IT stress		up	up		up	up			up				up	up				up	up		up	
E complex	up	up	up			down	up	down	Down	down	down	up	up	up	down	up	up					
E deskill								x	x	x	x				x							
E Work-life		down			down	up	up	up		up		up	up	down					up			
E Job satis	+/-		+/-	down		down	down	down	down	up	down	+/-	+/-	Down	+/-		+/-	down	down	down		up
E Bore out				x		x		x														
E Formal						x	x				x		x	x		x					x	
E Differ								x				x			x			x				
Work cond				=	up		bonus	up		=	=	bonus	bonus	up			bonus					
Perspect		up						up		=	=	up								=		
Task adj	x	x										x										

# Comparison per concept

- Much variation!
- Findings
  - Technology: diverse!
  - Mixed impact on task division
  - Increased centralisation
  - HRM: Datadriven evaluation / focus on recruitment
  - Limited employee / union involvement
  - Line manager – changing role
  - Job Quality – growing gap



# Impact of division of labour?

- Digitalisation tends to foster more **active** jobs
- High or increasing level of labour division hampers this impact (leading to more **passive** job characteristics)
- High labour division related to increased **task standardisation**
  
- But
  - Not decisive factor for job quality
  - No clear relation to impact on line manager



# Actor approach

Three management strategies

**Top-down digitalisation**

Mainly large MNO

**Bottom-up digitalisation**

Mainly online platforms  
and knowledge orgs

**Incremental digitalisation**

Wide range of orgs

# In general, cases confirm...

## Positive elements

- limited division of labour
- decentralised management
- competence management
- employee participation
- line manager as a coach
- sufficient autonomy, task variation and informal communication opportunities

## Negative elements

- top-down imposed digitalization
- lack of change management
- differentiation between employees
  - some see job content improve
  - others at risk of facing either bore-out or techno-stress and eventually replacement

**No single case shows all positive (or negative) elements together → balancing act**

# Key insights

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Division of labour creates the context

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Employment relationship measures underused

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No one-size-fits-all solution

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Digital transformation is not a neutral process

# Next steps

- Situation:
  - 121 interview transcripts, 22 case reports, coding table
  - (Descriptive) comparative analysis, actor analysis
- Goal:
  - Further analysis on link technology, organisational choices and outcomes
- Options:
  - Qualitative Comparative Analysis (QCA)
  - Comparative analysis within subsets (most similar / most different /...)
  - Focus on one type of output (Impact Line manager / General employees)

# More information?

- [Case study report](#)
- [Policy brief](#)
- [SEAD final report](#)
- [Project website](#)

**SEAD**  
Sustainable Employment in the Age of Digitalisation:  
challenges, obstacles and opportunities  
CONTRAT N° B2/191/P3/SEAD

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February 2024  
<sup>1</sup> HIVA-KU Leuven

**Brain-be 2.0**  
Belgian Research Action through  
Networks  
2019-2023

**SEAD**  
Sustainable employment in the age of digitalisation  
Contract - B2/191/P3/SEAD

**FINAL REPORT**  
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**Digital transformation and job quality: Insights from Belgium**  
This SEAD policy brief highlights the impact of work organisation, HR management change in job quality brought about by digital technologies, drawing from 22 Belgian cases. It can lead to more active and autonomous jobs, high levels of task division and frequent these benefits. The study underscores the importance of integrating technology emphasising the need for competence management and employee participative organisation in shaping digital transformation outcomes and the necessity of acknowledging the varied effects across different organisational contexts.

**Context**  
Businesses are embracing new technologies to improve their effectiveness and evolution, application, and impact is crucial for achieving human-centred organisations. New technologies offer potential to enhance business processes and job quality harm job quality, with the same technology leading to both positive and negative how technology is deployed. This study focuses on how work organisation, HR management within an organisation influence the change in job content and job quality brought about by digital technologies.

**Main findings**  
We analysed the impact of digital technology on the workplace, drawing on 22 cases from different sectors, industries, sizes, and regions. Work organisation has experienced increased standardisation and others seeing a reduction in task fragmentation towards increased centralised control, driven by technological possibilities. HR new hiring and training strategies, and shifting disciplinary measures to more active (i.e. recruiting new workers) was more prevalent in the face of digitalisation of existing workers). Social dialogue around digital technology implementation via involvement and employee participation. The role of line managers has transformed while including more coaching tasks. The impact on job quality and employee well-being varies, with some experiencing increased work pressure and technostress, while others experiencing improvements in work-life balance. Overall, the study shows diverse effects of digitalisation on different organisations and sectors.

In general, digitalisation tends to lead to more active jobs, with increased challenges matched by more autonomy and support. But a work organisation context with high or increasing levels of task division and fragmentation hampers this link, leading to more passive job characteristics such as decreased task variety and less autonomy. Given the high variance in case characteristics between the organisations studied, work organisation could not be identified as the decisive factor for providing high quality jobs. However, the cases show that a digital transformation combined with a highly divided and fragmented work organisation can be related to increased task standardisation.

**BRAIN-be 2.0.** BELSPO (the Public Planning Service Science Policy) organises a research programme designed to strengthen the scientific basis of federal public policy and the strategy and potential of the Federal Scientific Institutions (FSI) since 2012.  
More: [www.belspo.be/brain-be](http://www.belspo.be/brain-be)

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**LENTIC** Technology - Innovation - Change  
**METICES**



*“While data from a European Agency for Safety and Health at Work survey suggest that human–robot interaction is associated with increased work intensity, increased surveillance, deterioration of the social environment and reduced autonomy, evidence from case studies suggests that the negative outcomes stem from organizational factors and management choices, rather than the technology itself.”*

Thank you!

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