



Introductory webinar

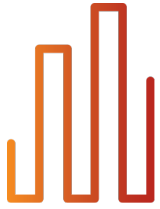
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Does the wisdom of human resource management still apply in a digitized work environment?

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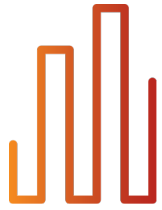


Digital transformation at the workplace

- Increasing use of digital tools (groupware, workflow, web-conference...)
- Automation of tasks, robots, artificial intelligence, Big data, platform economy
- Changes accompanied by organizational changes

→ With potential consequences on:

- **Employment: destruction of jobs but also creation of new jobs**
- **The skills required by companies**
- **The quality of jobs**
- **Employees' well-being: motivation, satisfaction, stress**



Results from previous projects

FNR TWAIN Project – Technology use at work and innovative work practices

Project supported by:  Luxembourg National Research Fund

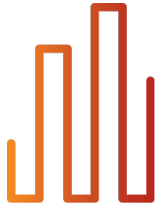
ESF Project – Info Flow Savvy – IMS Luxembourg

Project supported by:  LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère du Travail, de l'Emploi et de l'Économie sociale et solidaire
 LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG
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digital luxembourg
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POWERING BUSINESS
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FNR DIGITUP Project – Digital upskill in a telework environment

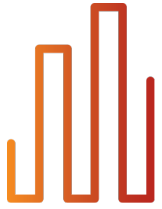
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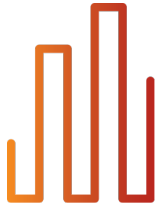
Overview

- **1st analysis:** How do information and communication technologies (ICT) and managerial practices affect employees' motivations?
- **2nd analysis:** What are the links between employees' information overload and their well-being?
- **3rd analysis:** What are the links between the profile of digital tools use during the lockdown and the evolution of teleworkers' well-being?



1st Analysis

How do information and communication technologies (ICT) and managerial practices affect employees' motivations?

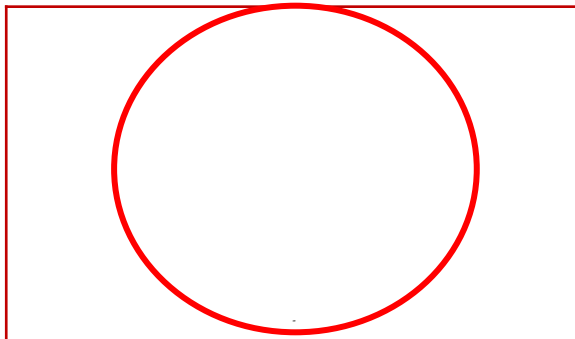


Work motivations

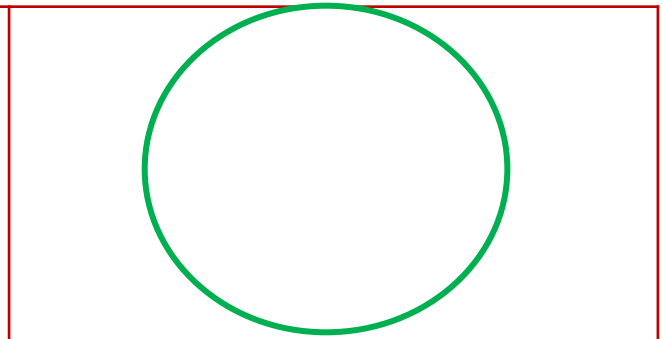
Controlled motivation	
Extrinsic motivation	Introjected motivation
Working for rewards (bonus or promotion)	Doing the tasks to boost self-worth

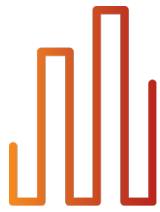


Autonomous motivation	
Identified motivation	Intrinsic motivation
Doing tasks aligned with values, meanings, or personal goals	Doing an activity driven by emotions (fun, pleasure)



Burnout
Be focused
Energy
Absenteeism
Somatization
Presenteeism





Effects of the use of technologies on motivations

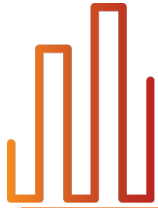
		Controlled motivation		Autonomous motivation	
		Extrinsic mot.	Introjected mot.	Identified mot.	Intrinsic mot.
Information technologies	ERP	0	0	0	0
	Workflow	0	+**	0	+**
	Internet	+***	+***	+**	+***
Communication technologies	Groupware	-***	-**	-***	-***
	Web-conference	0	0	-***	0
	Intranet	0	0	0	+*
	E-mail	0	+***	+**	+**
Individual, job & company characteristics		Yes	Yes	Yes	Yes

+ : Positive effect on motivation ; **-** : Negative effect on motivation ; 0: no effect; Coefficient *significant at 10%; **significant at 5%; ***significant at 1%.

* Further work on the information overload phenomenon (see 2nd analysis) shows that the use of these ICTs can have negative effects on the well-being of employees.

Field: Private sector employees working in Luxembourg companies with at least 15 employees (residents and cross-border commuters).

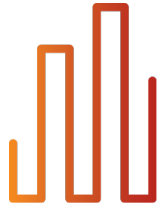
Source : QVT/POME Survey, LISER & Ministry of Social Security, Luxembourg, 2013



Effects of managerial practices on motivations

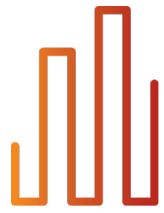
	Controlled motivation		Autonomous motivation	
	Extrinsic mot.	Introjected mot.	Identified mot.	Intrinsic mot.
Participation in a quality circle	0	-** (+)	-*** (+)	-*** (+)
Participation in downward communication	+***	-***	0 (+)	0 (+)
Participation in training(s)	0 (+)	0 (+)	0 (+)	0 (+)
Management recognition	+***	+***	+***	+***
Teamwork	+***	+*	+***	+**
Having to meet quality norms	0	+***	+***	+***
Job rotation	0	-***	0	0
Just in time	+***	+**	0	-***
Formal appraisal	+***	+**	+***	+***
Flexible work time	0	0	+***	+***
Telework allowed	0	0	+***	+***
Pay incentive	+***	+**	+***	+***
Front-line control	-***	0	-***	-***
Individual, job & company characteristics	Yes	Yes	Yes	Yes

() In brackets: sign of the correlation between managerial practice and type of motivation; without parentheses: sign of the causal link between managerial practice and the type of motivation corrected for the endogeneity of the motivations.

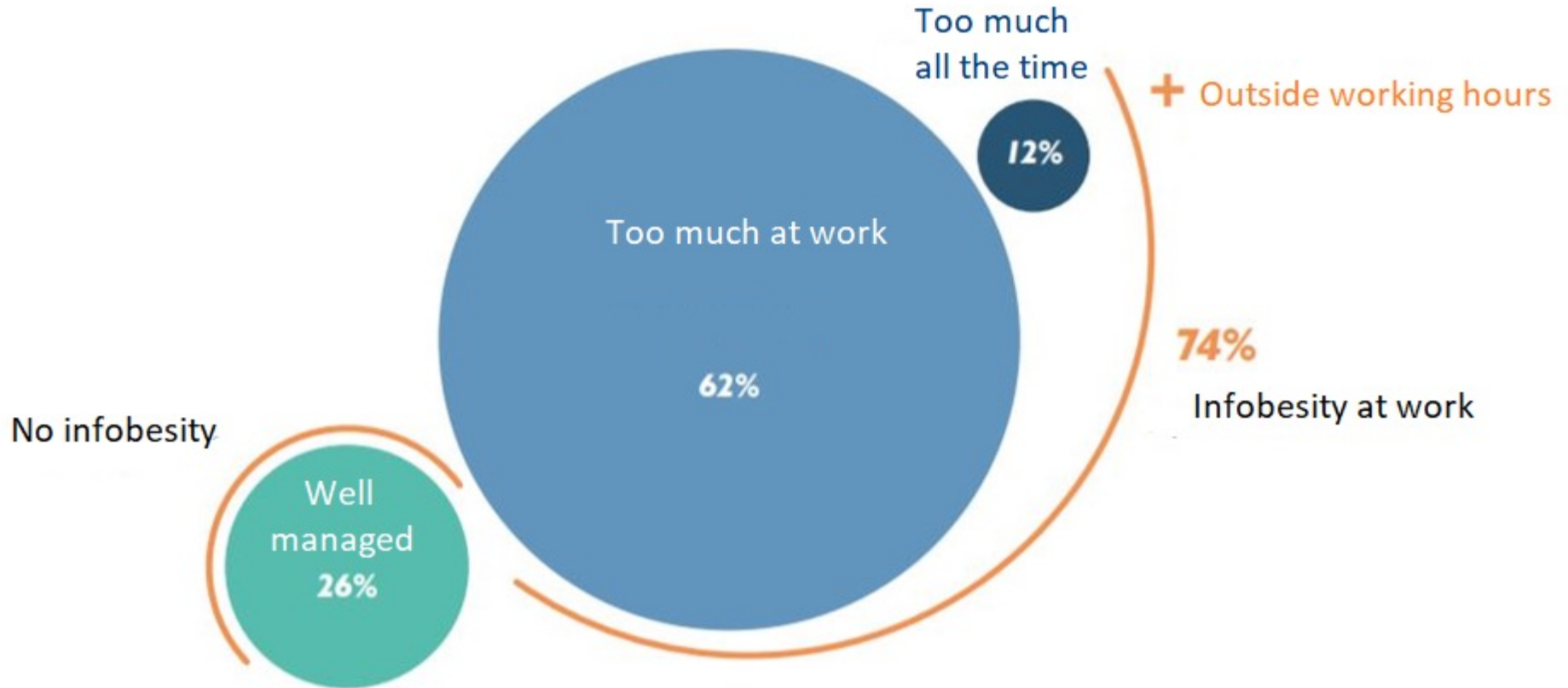


2nd Analysis

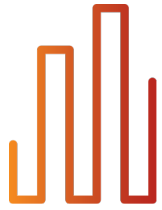
What are the links between employees' information overload and their well-being?



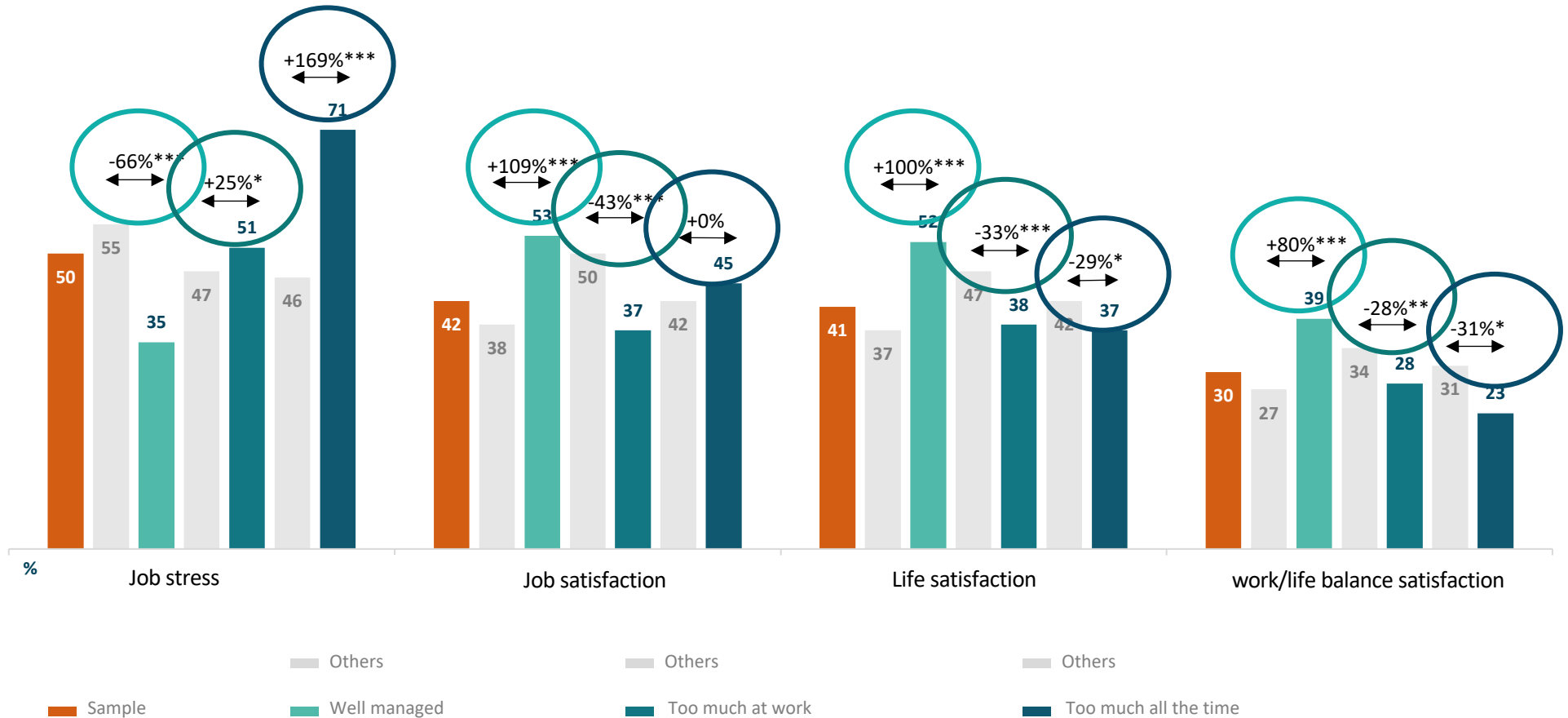
Information overload/infobesity risks linked to the use of digital tools



Field: white-collar workers working for an organization based in Luxembourg and member of the IMS network on 31 May 2019
Source: Barometer Info Flow Savvy 2019 – IMS Luxembourg, LISER



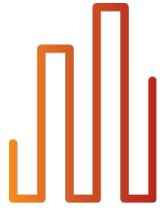
Infobesity risks and employees' well-being



Odd ratio *significant at 10%; **significant at 5%; ***significant at 1%.

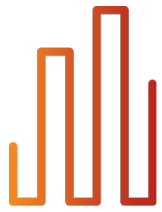
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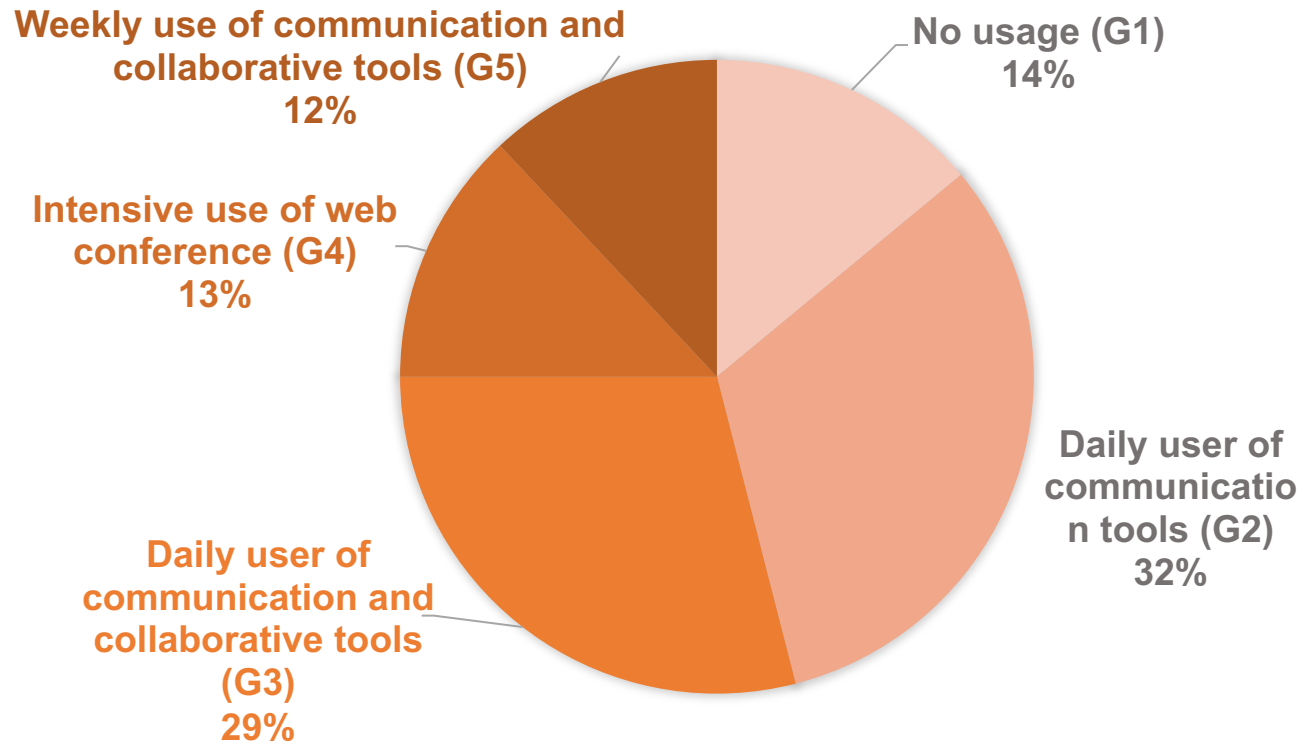


3rd Analysis

What are the links between the profile of digital tools use during the lockdown and the evolution of teleworkers' well-being?



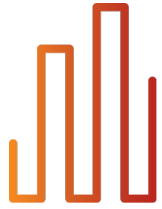
5 teleworkers' profiles of communication and digital collaborative tools use during the lockdown



Digital tools: groupware, workflow, instant messaging, web-conference.

Field: resident and cross-border workers who worked during the lockdown.

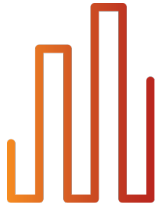
Source: SEI survey-COVID-19 Socio-Economic Impacts survey (LISER, Uni. Lu).



Digital tools use profiles and teleworkers' well-being during the lockdown

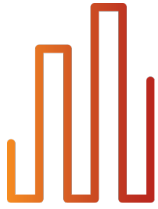
	Evolution of job satisfaction	Evolution of job stress	Evolution of job productivity
	Coef.	Coef.	Coef.
No user (G1)	Ref.	Ref.	Ref.
Daily user of communication tool (G2)	0	0	0
Daily user of communication & collaborative tools (G3)	-**	0	0
Intensive use of web conference (G4)	+**	-*	0
Weekly use of communication and collaborative tools (G5)	0	0	+*
Individual characteristics	Yes	Yes	Yes
Job characteristics	Yes	Yes	Yes
Workplace characteristics	Yes	Yes	Yes

*Coefficient significant at 10%; **significant at 5%; ***significant at 1%.

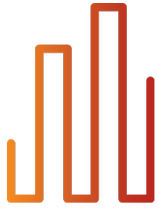


Managerial recommendations

- Managers should strengthen **teamwork** and **management recognition, flexible work time** to motivate employees
- They should encourage the resort to **digital tools that compensate for the lack of face-to-face interactions** between co-workers (especially in the Covid and post-Covid work environment)
- They should spread good practices regarding a **reasonable use of digital tools and notifications** in order to ward off drawbacks (hyper-connectivity, addiction, information overload/infobesity)
- They should propose **training** especially to employees who struggle with the use of digital tools



We intend to deeply investigate the effects of digitalization, globalization, demographic changes on job quality and employees' well-being



Thanks for your attention!

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