Managing work activities in 2040: which challenges for OSH?

Jennifer Clerté / Marc malenfer

Watch & foresight mission – **INRS**

Euroshnet 2024

Our job: making yours safer

www.inrs.fr

Background of the study

Context :

- For companies:
  - economic, geopolitical, environmental and technological instability is leading to a search for ever greater agility.
  - For employees: the COVID crisis has revealed a desire among workers for more meaning at work and a better work/life balance. The current ecological transition implies a transformation of production systems.

- Objective:
  - To consider possible changes in working practices between now and 2040
  - To imagine what forms of management could emerge from this context between now and 2040. Identify the possible consequences for health and safety at work.

- Focus :
  - Managing of work activities ; meaning: functions which provide a framework for the work activities themselves and which aim to organise, control and evaluate the performance of the activities.
  - This includes: setting objectives, defining the organization of work, processes, tasks and the resources required to carry them out, leading teams and providing individual support, assessing and monitoring performance (collective and individual).

Methodology

A multidisciplinary approach :

- Creation of a working group of 8 people
- More than 60 experts, company directors and students were approached: 16 interviews, 6 company visits, 34 workshop participants

A three-stage approach:

- Component 1: Retrospective & megatrends analysis :
  - Current transformation, evolution of the main management trends, 12 work dynamics

- Component 2: design fiction phase :
  - Objectives: Design off fictitious personae and companies from 2040 and stories of working conditions most likely to encourage OSH risks in these organizations.
  - Production of a design fiction workbook

- Component 3: analysis of fictitious cases by a group of 23 OSH experts
  - to answer 3 questions:
    - > Which OSH issues and opportunities are raised by these fictitious cases?
    - > What should be done (and at what level) to make the changes positive?
    - > What is the role of the occupational health and safety officer in the face of these developments, and how can they act today?

COMPANIES FACED WITH A CHANGING ENVIRONMENT
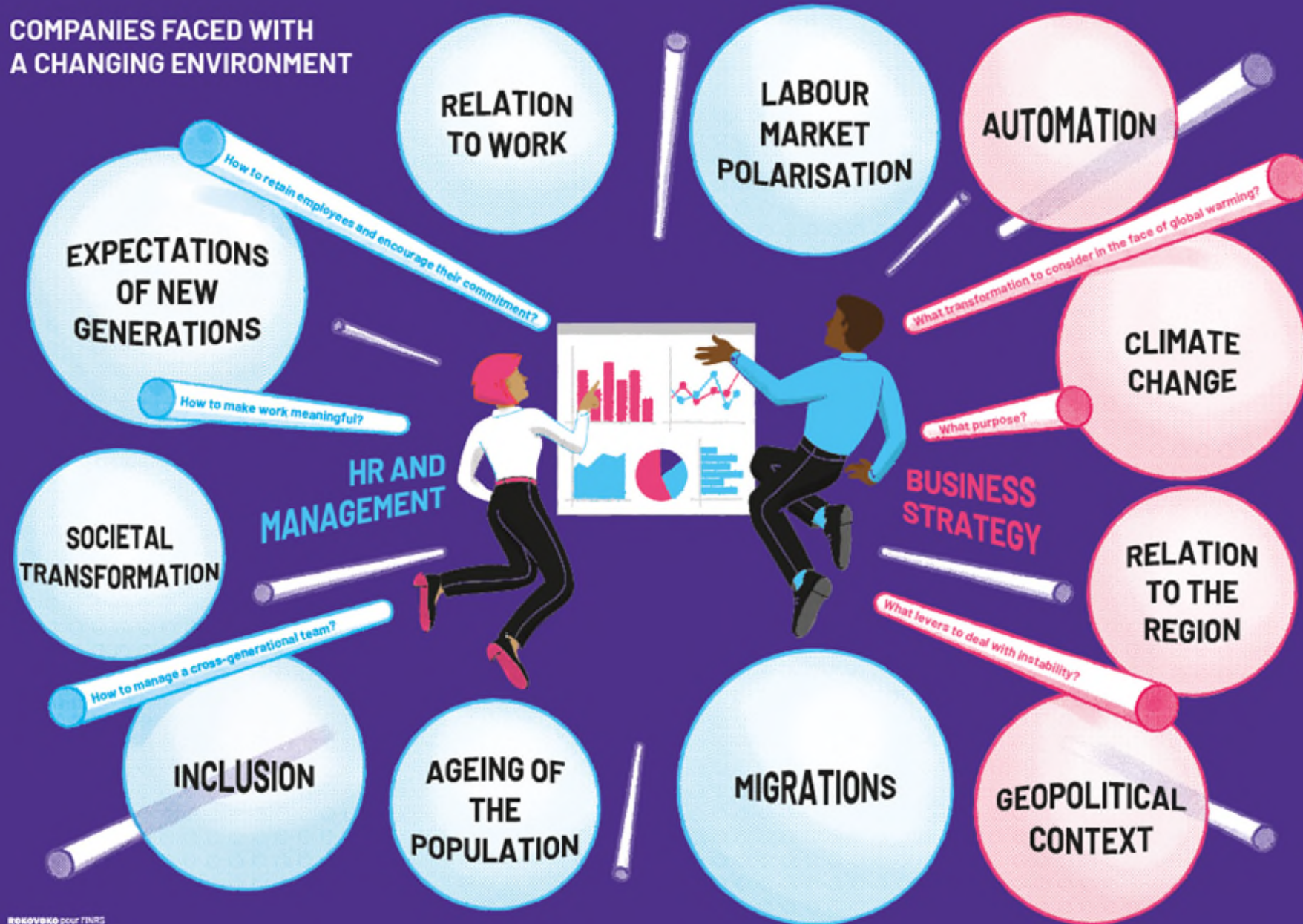
A CENTURY OF CHANGES IN HOW WORK IS MANAGED
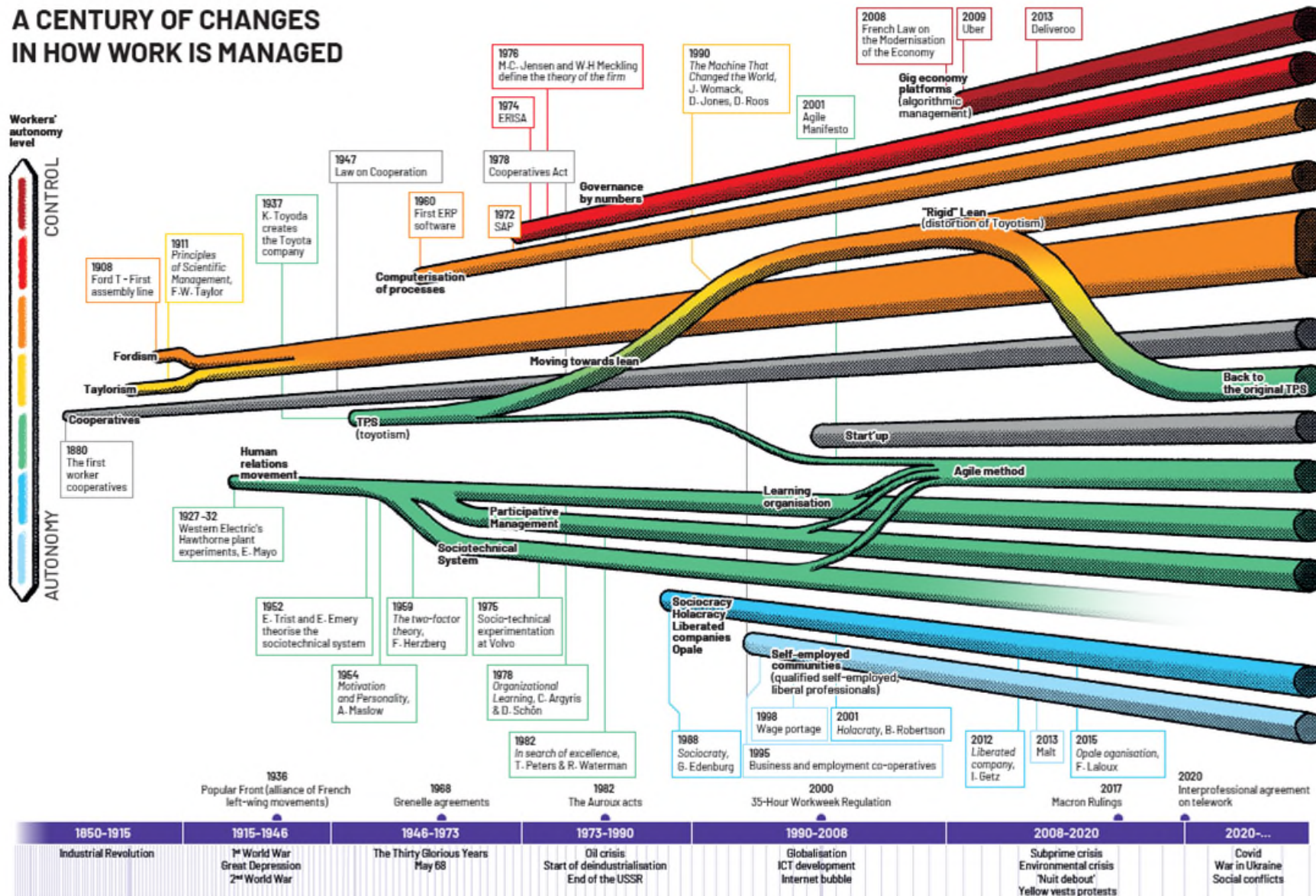
Work dynamics

Work organisation			Business models	
Working time	Work status		Cooperative model	Process computerisation
Remote work	Communication tools		Collaborative economy	Outsourcing
Workplaces	Social and professional dialogue		Industrial management	Uberisation

Component 1 results : 10 key-trends

An increasingly individual relationship with work

Teleworking, the "ratchet effect"

Digital technology (software, robots, AI systems, etc.) everywhere

"Only the result counts"

Accumulation of objectives

A growing desire for self-employment

More complex and rigid business management

A more complex and remote role for proximity managers

Emerging new management methods

Difficulties in recruiting and retaining employees

Component 1 results : 4 potential evolution by 2040

Hybridisation of self-employed and employee status could emerge:

- introduction of more protective self-employed models or
- a more flexible subordination model.

New technologies will play an ambivalent role, depending on how they are used:

- they will make work easier or less arduous,

BUT

- they may prove to be **both beneficial and deleterious**, depending on whether or not real work and the point of view of workers are taken into account in their design and implementation.
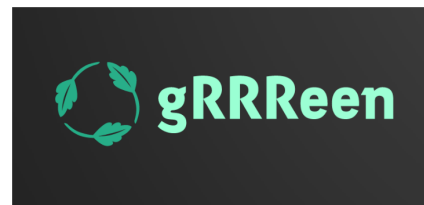
The development of new management methods may continue :

- environmental crisis
- quest for meaning
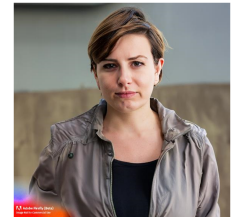
=> questioning of traditional management methods.
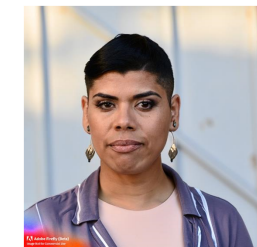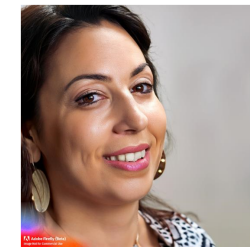
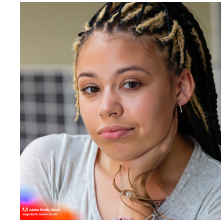**Possible development of multi-activity:**

- recourse to new working time organisations
- teleworking => risk of extending effective working hours and intensifying the pace of work.

Component 2 : Design fiction : 8 companies and 10 personae

LES HARMONIALES

flex.co

MOB'AGRO

CO-PEINT
COMPAGNONS COBOTISÉS

cycle²

FRANCE INCLUSIVE

NATUR.IELLES

gRRReen

Iag : looka.com

Iag : firefly.adobe.com

CO-PEINT
COMPAGNONS COBOTISÉS

Presentation of Co-peint:

Co-peint was founded in 2034, based on the observation that construction workers were being unfairly exploited by specialized platforms, and that self-employed workers and very small businesses were encountering difficulties to access the most high-performance cobotic equipment: tracked painting robots, equipped with high-precision spraying drones and articulated arms.We have chosen the Coopérative d'Activité et d'Emploi (CAE) status for an alternative, fairer and more humane model. Our workers are all salaried contractors, managing their worksites autonomously and contributing to a common fund. As such, they can use the cooperative's cobots on pre-booked slots. The availability of slots depends on the seniority of the journeymen and their status. Associate status in the CAE is open to companions from the third year onwards, and enables them to become co-owners of the cobots. Co-peint is committed to a more inclusive and supportive construction industry. Our model enables some painters to avoid losing their jobs at the end of their careers. That's why the public authorities pay for cobot training for senior journeymen.

Humans@Work

About me :

I love building sites: I love renovating or giving a soul to houses, flats, offices, shops and so on. Each site is also a new human adventure made up of new encounters. To think that I almost gave up this job because of the physical problems it caused me... Since I joined Co-peint, I can rely on the latest generation of cobots to carry out the most difficult tasks. Professional equipment. I concentrate on what I like best in this job: working with my clients, helping them choose the right paint, the right materials... Controlling my cobot to the millimetre. And listening to loud techno-metal while I work. It's a blast! Co-peint is also a great human adventure, where everyone contributes their bit to the edifice, and the community pays you back in kind. One for all, each to his own project, but all for one: a common crate and cobots to share !

Guillaume M.

Cobot pilot house painter

Age : 63 years old

Town : Strasbourg

Expérience :

- Since 2038: Contractor house painter employed at the Co-peint cooperative: carrying out interior and exterior painting work.
- 2037: Rehabilitation / reintegration
- 2029-2036: Manager of a very small building painting business. Up to 3 employees under my responsibility.

Training :

- CAP (vocational training certificate) as a coating applicator
- 2037: Further training leading to a qualification: "Working with a Cobot", option "painting in the building trade".

Component 3 results (1/3) : Potential risks for OSH

- Techno-centric organisations limit the role of human management and contribute to work intensification.

- Quantitative assessment systems focus on results, to the detriment of a qualitative approach that takes into account working conditions and the resources available to workers to carry out their tasks.

- The company purpose ('raison d'être') does not always place workers' health at the centre of concerns.

- The development of HR expectations focused on behaviors or "soft skills" could be to the detriment of professional know-how, which also include safety skills.

Component 3 results (2/3) : creating an environment favourable to prevention

- Maintain and **clarify responsibilities in terms of prevention**, include all workers under the same occupational injury insurance scheme.

- Maintain the role of proximity managers, acting in daily contact with operators **in a support role, and relaying information to the top management**,

- Integrate **collective discussion forums** on work into all forms of activity management in order to establish effective social and professional dialogue,

- Enabling working conditions to be improved **on the basis of real work**.

- Take account of real work and the impact on OSH **throughout the life cycle of ICTs,** from the design stage onwards,

- Take into account the general principles of prevention **when modifying production systems in connection with the decarbonisation of the economy**,

- Integrate a foundation of **basic knowledge on prevention supporting workers throughout their career.**

Component 3 results : Perspectives for prevention workers

- **New roles**: Supporting social and professional dialogue within the organizations in which they work, supporting techno-organisational transformations

- **New skills to be acquired**: Knowing how to use data collected in the workplace and from workers for collective prevention purposes.

- **Understanding technologies** and their implications for work organization

=> Strong need to develop a watch and an expertise on technological, industrial and managerial developments and their consequences for OSH.