

Observatoire des futurs
EM Strasbourg

Employment and Training

EM Strasbourg BUSINESS SCHOOL
Université de Strasbourg
AACSB ACCREDITED
ASSOCIATION OF MBAS
EQUIS ACCREDITED
EFMD ACCREDITED | MASTER
IAE FRANCE Ecoles Universitaires de Management
CONFÉRENCE DES GRANDES ÉCOLES

Regulatory Changes in Labor Law, Changes in Occupations, and Training Programs

(Higher education, continuing education, vocational training, etc.)

1. Definition and Relationships with Other Factors

General Definition

According to the Department of Labor:

“An employment contract exists from the moment a person (the employee) agrees to work, in exchange for compensation, on behalf of and under the direction of another person (the employer). The employment contract must generally be in writing. It specifies the compensation, qualifications, working hours, and, more generally, the employee’s duties. It entails a number of obligations for both the employee and the employer. There are different types of employment contracts depending on their duration, the employer’s business, or the nature of the work assigned to the employee . . .”

General Definition

The Department of Labor includes the following categories under labor law:

- **Employment contracts (term of the contract + termination of the employment contract)**
- **Compensation**
- Employee savings plans
- **Working hours**
- Vacation and absences
- Managing disabilities in the workplace
- Domestic employers
- Employment equality, discrimination, and harassment
- Internal policies and managerial authority
- Resolving individual and collective disputes
- Combating illegal employment
- Secondment of employees

The three dimensions of work that are particularly affected by uberization and which will be discussed in detail in this report.

Job Transformation and Work Organization

New occupations:

A vast number of jobs are becoming digitized; there is a distinction between“core” digital jobs and those that merely“use” technology:

- **“Core” digital professions**, which produce digital technologies (computing, telecommunications, and electronics).
- **New professions that have emerged from and for the digital sector**—such as community manager, data scientist, and data analyst—which can be found in all industries.
- **Occupations that have been impacted and require an adaptation of skills** , such as those in audiovisual or industrial production—for example, e-maintenance technicians—which are linked to the impact of changing production methods.
- **Jobs that are not radically transformed** , even though digital technologies provide them with new tools.

Table 3: Examples of stable, new and redundant roles, all industries

Stable Roles	New Roles	Redundant Roles
Managing Directors and Chief Executives	Data Analysts and Scientists*	Data Entry Clerks
General and Operations Managers*	AI and Machine Learning Specialists	Accounting, Bookkeeping and Payroll Clerks
Software and Applications Developers and Analysts*	General and Operations Managers*	Administrative and Executive Secretaries
Data Analysts and Scientists*	Big Data Specialists	Assembly and Factory Workers
Sales and Marketing Professionals*	Digital Transformation Specialists	Client Information and Customer Service Workers*
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Sales and Marketing Professionals*	Business Services and Administration Managers
Human Resources Specialists	New Technology Specialists	Accountants and Auditors
Financial and Investment Advisers	Organizational Development Specialists*	Material-Recording and Stock-Keeping Clerks
Database and Network Professionals	Software and Applications Developers and Analysts*	General and Operations Managers*
Supply Chain and Logistics Specialists	Information Technology Services	Postal Service Clerks
Risk Management Specialists	Process Automation Specialists	Financial Analysts
Information Security Analysts*	Innovation Professionals	Cashiers and Ticket Clerks
Management and Organization Analysts	Information Security Analysts*	Mechanics and Machinery Repairers
Electrotechnology Engineers	Ecommerce and Social Media Specialists	Telemarketers
Organizational Development Specialists*	User Experience and Human-Machine Interaction Designers	Electronics and Telecommunications Installers and Repairers
Chemical Processing Plant Operators	Training and Development Specialists	Bank Tellers and Related Clerks
University and Higher Education Teachers	Robotics Specialists and Engineers	Car, Van and Motorcycle Drivers
Compliance Officers	People and Culture Specialists	Sales and Purchasing Agents and Brokers
Energy and Petroleum Engineers	Client Information and Customer Service Workers*	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers
Robotics Specialists and Engineers	Service and Solutions Designers	Statistical, Finance and Insurance Clerks
Petroleum and Natural Gas Refining Plant Operators	Digital Marketing and Strategy Specialists	Lawyers

Source: Future of Jobs Survey 2018, World Economic Forum.

Note: Roles marked with * appear across multiple columns. This reflects the fact that they might be seeing stable or declining demand across one industry but be in demand in another.

New Forms of Work Organization

"Telework refers to any form of work arrangement in which work that could also have been performed in the employer's facilities is carried out by an employee outside those facilities on a regular and voluntary basis using information and communication technologies under an employment contract or a supplementary agreement thereto."

Article 46 of Law No. 2012-347 of March 22, 2012.

"The Law on Strengthening Social Dialogue (Article L. 1222-9 of the Labor Code) introduces major simplifications for implementing telework. First, it is no longer necessary to amend the employment contract to allow an employee to telework. Second, telework can be implemented in three different ways:

- *By a simple agreement with the employee, by any means (verbal agreement, email, letter, etc.)*
- *through a collective agreement;*
- *through a policy developed by the employer, after consulting the social and economic committee, if one exists.*

In any case, when an employer denies an employee the option to work remotely for a position that allows it, the employer must provide a reason for the denial."

Source: https://travail-emploi.gouv.fr

New Forms of Work Organization

- **Coworking spaces**

In 2018, there were more than 600 coworking spaces in France (a tenfold increase since 2012), according to statistics from Bureaux à Partager.

Coworker profiles: startups, very small businesses, freelancers, and large corporations.

These coworking spaces act as intermediaries for open innovation (Julie Fabbri and Florence Charue-Duboc, 2016) by creating social and economic value (e.g., organizing events, identifying new partners, and developing new offerings).

- **Nomadic workers**

Shift from office-based work practices to mobile work practices (Lecko Report, 2019), accompanied by the growing blurring of boundaries (professional work managed during personal time and, conversely, personal tasks carried out during work hours)

The rise of Bring Your Own Device (BYOD) or the consumerization of technology: employees bring their personal devices to the workplace (Leclercq-Vandelanmoitte, 2015).

The emergence of Enterprise 2.0, defined as the use of emerging social platforms within companies or between companies, their partners, and their customers (McAfee).

New Skills

- **Key skills of various kinds:** digital, technical (STEM), social (teamwork, active listening), cognitive (the ability to solve complex problems, innovate), and personal (adaptability, initiative, empathy) (Bidet-Mayer and Toubal, 2016)
- **Key skills defined by the OECD and the 4Cs:** creativity, critical thinking, communication, and collaboration, as well as problem-solving.

Today, 2018	Trending, 2022	Declining, 2022
Analytical thinking and innovation	Analytical thinking and innovation	Manual dexterity, endurance and precision
Complex problem-solving	Active learning and learning strategies	Memory, verbal, auditory and spatial abilities
Critical thinking and analysis	Creativity, originality and initiative	Management of financial, material resources
Active learning and learning strategies	Technology design and programming	Technology installation and maintenance
Creativity, originality and initiative	Critical thinking and analysis	Reading, writing, math and active listening
Attention to detail, trustworthiness	Complex problem-solving	Management of personnel
Emotional intelligence	Leadership and social influence	Quality control and safety awareness
Reasoning, problem-solving and ideation	Emotional intelligence	Coordination and time management
Leadership and social influence	Reasoning, problem-solving and ideation	Visual, auditory and speech abilities
Coordination and time management	Systems analysis and evaluation	Technology use, monitoring and control

Skills of the Future, Source: World Economic Forum report, September 17, 2018, p. 12

Pennel, D. (2013). *Quel avenir pour le travail à l'heure de la révolution individualiste? Le Seuil*

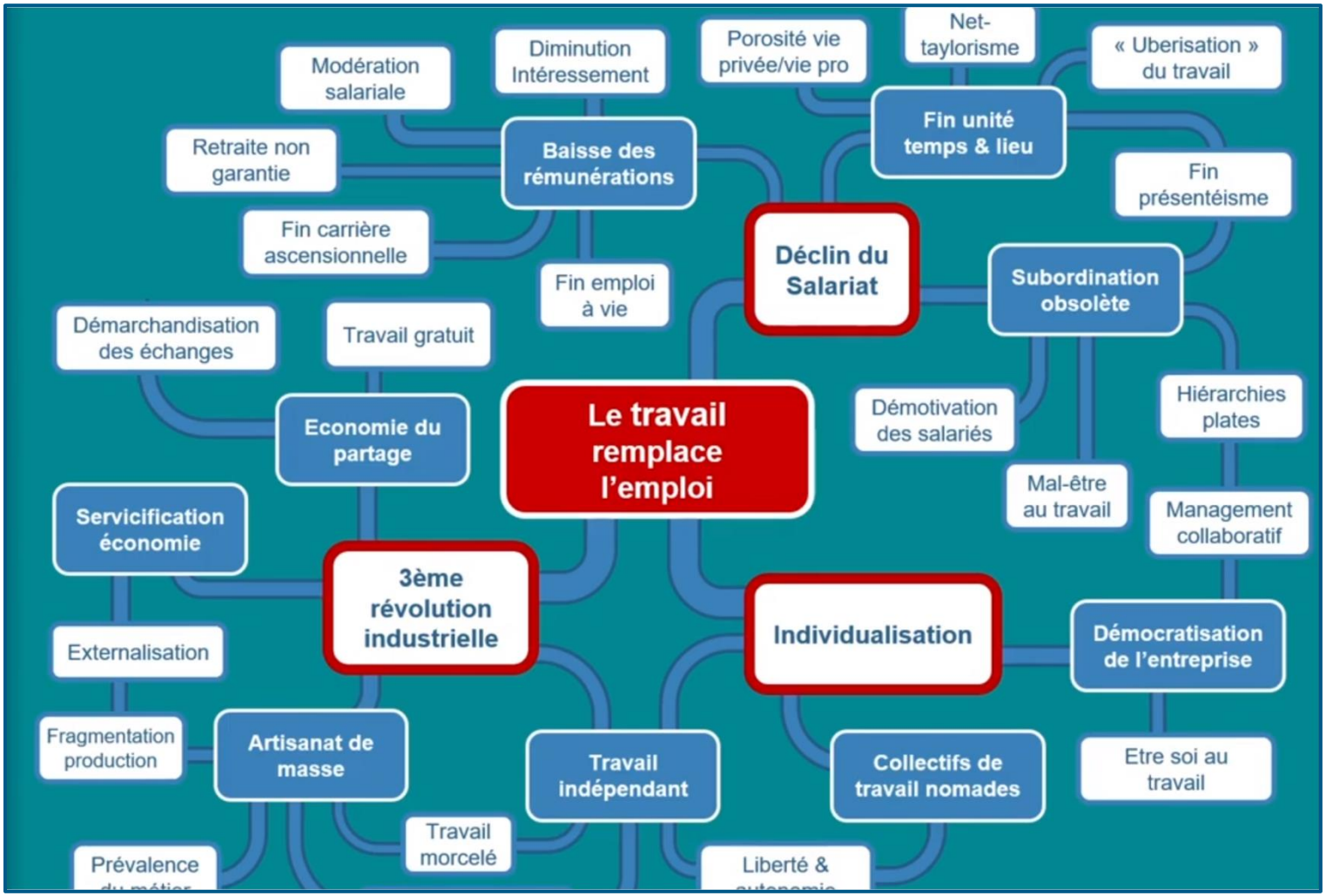


Diagram by Dennis Pennel illustrating the links between changes in work and other factors

Connection to Uberization and Industry 2030

Key Questions for the Future

- **Is a job automatable or not?** Expected responsiveness to external demands (customers, the public, etc.) vs. the strict application of instructions to perform one's work > jobs requiring a quick response to external demand with some leeway are difficult to automate, whereas well-defined tasks whose pace is not determined by unpredictable external demand are easier to automate (France Stratégie).
- **Workforce and Skills Planning (GPEC):** Predictability of future skills to be developed (in relation to the impacts of the digital revolution on customer expectations, product improvement, collaborative innovation, and organizational structures)?
- **Capacities for assessing and developing skills?** A classic challenge exacerbated by uncertainties regarding the relationship between people and technology.
- **Designing tailored training programs,** updating teaching methods, and planning ambitious training initiatives: the ability of training professionals to anticipate and adapt, and the capacity of training institutions to collaborate with organizations?
- **Acceptability/sustainability of changes:** Organizational cultures that are more or less compatible (industrial culture vs. digital culture); financial and technical support provided by individuals, organizations, and institutions (who develops the skills?) > what kind of change management is needed?
- **Impact on HRM practices:** recruitment, career mobility?
- **Legal barriers** to uberization + training institutions?

2. Summary of the Retrospective Analysis

Retrospective

In General and for Uberization and Industry 2030

- **One-third of skills will be obsolete by December 1, 2023** across all occupations and sectors (World Economic Forum).
- **In France, more than 10 percent of jobs are at** risk of disappearing.
- **Digital technology is transforming work and how it is organized:** there is very high demand for skilled workers.
- **Digital skills shortage in Europe** (ICT practitioners) is projected to reach approximately 900,000 jobs by 2020
- **Job creation:** Every job created in the high-tech sector leads to the creation of approximately five additional jobs (Moretti, 2010; Goos, 2018); For every 100 jobs created in a sector exposed to international competition, 64 additional jobs are created in the same employment area (and 25 in other companies within the exposed sector), with induced job creation effects abroad (Frocrain and Giraud, 2016).
- **France's industrial competitiveness:** thanks to tax reforms and reductions in payroll taxes implemented by the government in recent years, labor costs in the industry were lower in France than in Germany in 2017 (€38.8 euros versus €40.2 euros).

Sources
Frocrain, P., & Giraud, P. N. (2016). Les emplois exposés et abrités en France. La Fabrique de l'industrie, Les synthèses de la Fabrique, (9).
Goos, M. (2018). The impact of technological progress on labour markets: policy challenges. Oxford review of economic policy, 34(3), 362-375.
Moretti, E. (2010). Local labor markets (No. w15947). National Bureau of Economic Research
Numérique et emploi : quel bilan ? Les Synthèses de La Fabrique, Issue 12–April 1, 2017

Retrospective

In General and for Uberization and Industry 2030

- **Evolution of the employment relationship, including its legal, social, and even societal dimensions:** status of the employment relationship, types of contracts, and respective obligations
- **Coexistence of different employment statuses within the same scope:** forms of salaried employment (permanent, fixed-term, etc.) alongside flexible forms of self-employment: freelancers, self-employed entrepreneurs, permanent employees, fixed-term employees, etc.

Regulation

- In 2019, the Paris Labor Court reclassified the contracts of two former couriers for the delivery company Take Eat Easy as contracts on a permanent basis, and the Court of Cassation recognized the “subordinate relationship” between the startup—which went bankrupt in 2016—and its deliverers.
- See also the rulings of the Court of Cassation dated November 28, 2018, the Paris Court of Appeals dated January 10, 2019, and the judgment of the Nice Labor Court dated January 22, 2019.

Current Trends

In General and for Uberization and Industry 2030

- **Segregation of the labor market into** a “low-skill, low-wage” segment and a “high-skill, high-wage” segment, which will intensify social tensions.
- **Transparency and matching of the supply and demand for skills:** Digital platforms. Examples include the development of freelance platforms that control the work: Creads, Malt, Codeur, Textmaster, and Digicomstory, etc. (replacing digital agencies)
- **Decrease in the number of hours worked** by employees in companies
- **Integration of customer labor into the value chain** (as IKEA does by having its customers help assemble furniture, or through self-checkout lanes in supermarkets)
- **Industrial initiatives to bring industrial hubs closer to apprentice training centers**
- **Regional initiatives** (the “Entreprises et territoires” report by the Institut de l’Entreprise): ecosystems centered around businesses—often family-owned—and examples of reshoring
- **Educational institutions** (schools, companies, etc.) facing competition from other formats: expansion of learning sources, such as social media platforms for connecting, learning, and sharing information

3. Summary of Prospective Exploration

Major Trends / Constants

- **Segregation of the labor market between** a “low-skill, low-wage” segment and a “high-skill, high-wage” talent segment > this distinction also holds true for production workers (Jirjahn, U., and Kraft, K., 2010). Teamwork and intra-firm wage dispersion among blue-collar workers. Scottish Journal of Political Economy, 57(4), 404–429.
- **Automation** replacing labor across the entire economy.
- **Reduction of physically demanding work** (robots complement human workers in physically demanding and repetitive tasks on the assembly line; operators focus on maintenance, quality control, or guiding a robot in a complex environment).

Uncertainties

- **The role of humans**, the nature, and the value of human intervention in the production systems of the Factory of the Future.
- **Predictability of job displacement** and the future skills that need to be developed (none of the ten most in-demand jobs in 2010 existed in 2004).
- **Competitiveness of the French job market in the high - tech sector .**
- **Impacts of these demands for skill development on personal and professional levels** (acceptability, link to management practices, and changes in social regulations)

Seeds of Change

- Cobotics: robots assisting individuals in their work (human + machine)
- De Vaujany et al. (2018) proposes four possible scenarios and environments to illustrate the evolution of the working world by 2030. These four scenarios are likely to transform work:

1) "Freelancing" > Society is made up of an increasing number of self-employed workers (particularly freelancers) and entrepreneurs. We are entering an era of widespread subcontracting. People are paid on a per-task or per-project basis. These new workers embody a sense of empowerment, a new lifestyle (more mobile, remote, and connected), and, at times, new forms of hardship.

2) "Salaried Employment" > Salaried employment remains at the heart of the economy and society. Contracts are increasingly short-term. More than 70 percent of French employees are on fixed-term contracts. The relationship of subordination remains predominant in the conception of work and managerial practices. Platforms exist but facilitate services and content that are negotiated and contracted on a short-term basis

3) "Hybridization" > Managers, policymakers, activists, and legislators are proving particularly innovative in creating hybrids between salaried employment and entrepreneurship. Legal structures, such as business and employment cooperatives (CAEs) (CAEs are unique in offering the status of a salaried entrepreneur) or self- entrepreneur, are being reinvented and expanded.

4) "Universal Basic Income" > Everyone earns a basic income of roughly the same amount . . . but disparities in wealth and supplemental income persist. Forms of salaried work and entrepreneurship continue to exist, but they are becoming increasingly disconnected from the idea of status and performance. The very meaning of the activity itself becomes essential.

Seeds of Change

Source: François- Xavier de Vaujany, Amélie Bohas, Sabine Carton, Julie Fabbri, Aurélie Leclercq Vandelannoitte . Le futur du travail en 2030 : quatre atmosphères ? [Research Report] RGCS (Research Group on Collaborative Spaces). 2018 . ffhalshs - 01945379f

- Regulation through networks and interfaces (will replace the chain of command).
- New ways of training and educating :
  - The 42 schools are two self - directed higher education institutions not recognized by the state, whose goal is to train developers .
  - MOOCs.

Controversies

- **Widening inequalities and social tensions** associated with market segmentation (individuals with skills versus others who are replaceable).
- **Widening gap between the returns on capital and those on labor.**
- **The end of work vs. increasingly skilled work** linked to the emergence of new products and services.
- **Autonomy vs. control:** more flexible, horizontal, collaborative organizations that grant employees greater autonomy (Bourdu et al., 2016) vs. risks for employees (potential increase in psychosocial issues, control, surveillance, prescribed work, etc.) associated with digitalization.
- **Choice between machine resources and human resources**
- **Paradoxes / dilemmas highlighted by the RGCS think tank:** mobility vs. sedentary lifestyles; entrepreneurship vs. dependence; freedom vs. security; autonomy vs. control; digitalization vs. physicality, etc.

Disruptions

- **Competition between countries and firms intensified by the internationalization** of the labor market and skills.
- **A break in the logic of predictability.** (e.g., changes in workforce and skills planning)
- **The end of the Uber model?**

Sources consulted

- https://travail-emploi.gouv.fr/
- https://travail-emploi.gouv.fr/emploi/
- http://grand-est.direccte.gouv.fr/Statistiques-4993
- https://collaborativespacesstudy.wordpress.com/



Observatoire des futurs

EM Strasbourg

Observatoire des futurs
EM Strasbourg

Report written by **Jessie Pallud & Jocelyne Yalenios**
Translated by **DeepL**

EM Strasbourg Business School
61, avenue de la Forêt-Noire
67000 Strasbourg

observatoire-des-futurs.com