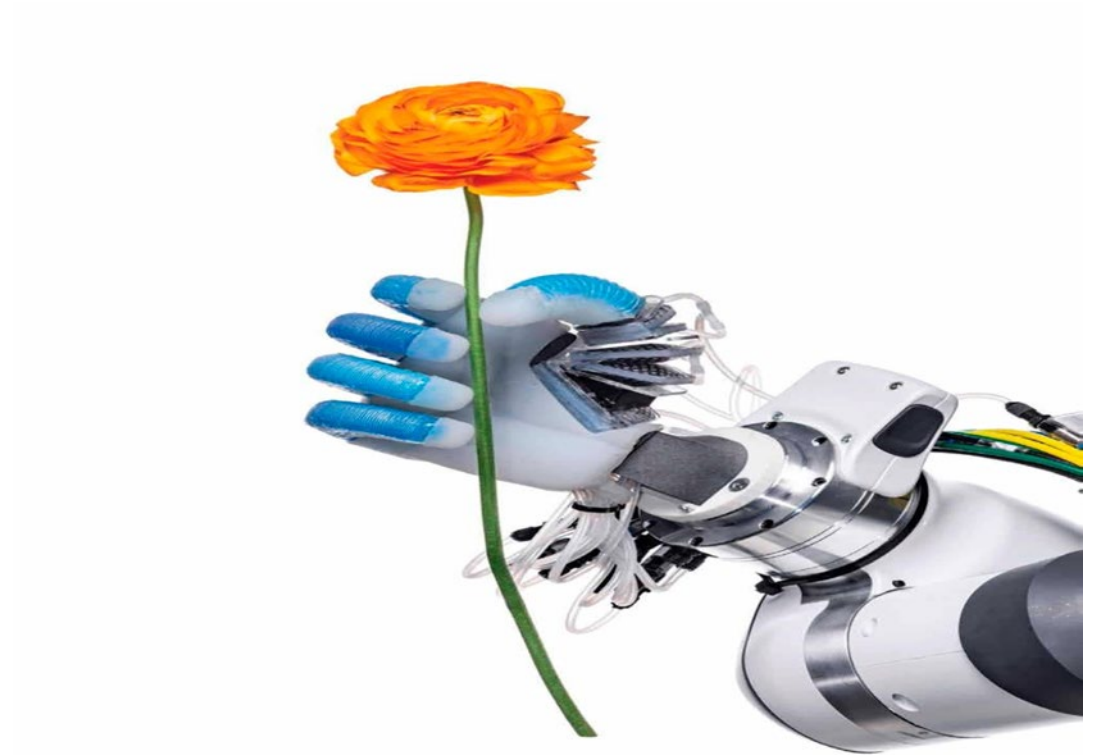


Towards a Digital Labour Law: Algorithms and AI

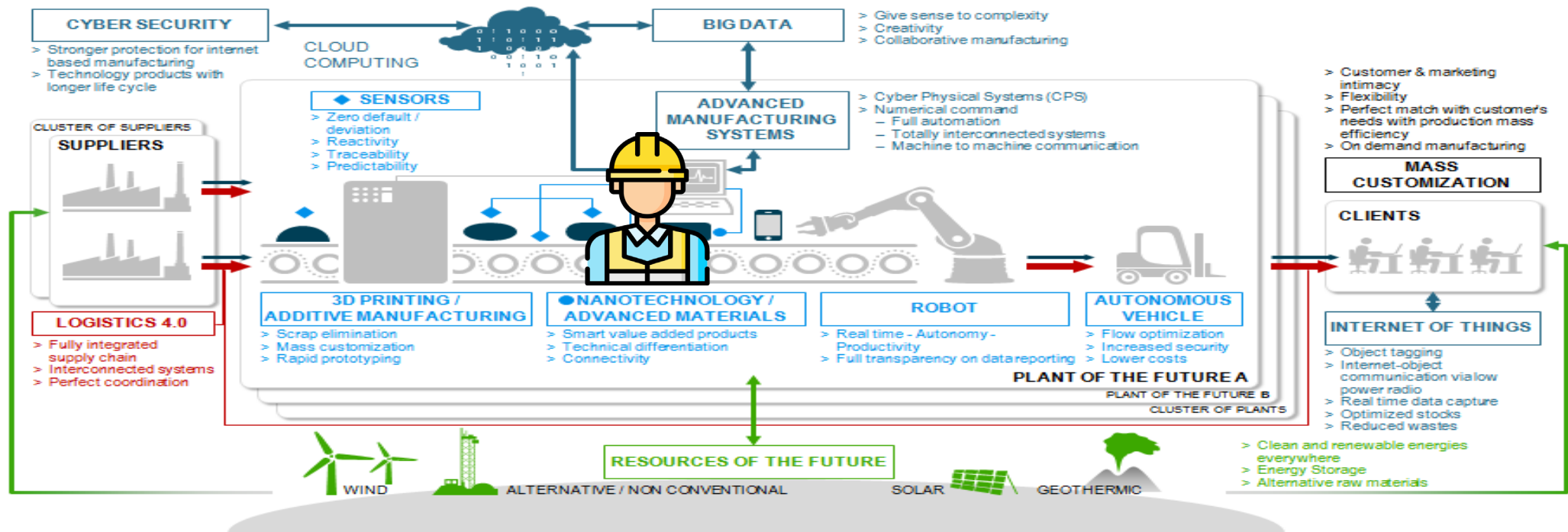
Jesús R. Mercader Uguina
Professor of Labour and Social Security Law. Carlos III University of Madrid

I. The labour ecosystem, an expanding universe



The "canaries in the coal mine" of technological change

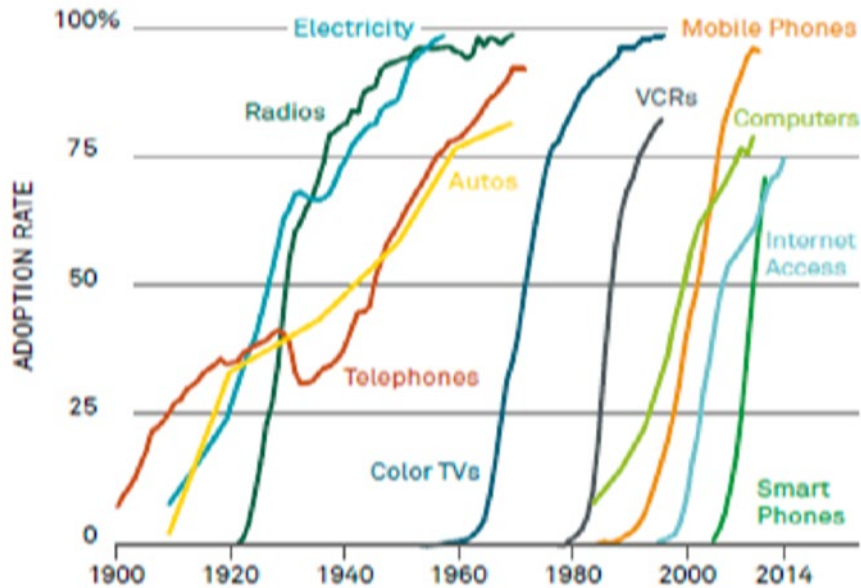
The Industry 4.0 ecosystem



Rapid development.....

QUICKER ADOPTIONS

U.S. Technology Adoption Rates, 1900–2014



Sources: BlackRock Investment Institute, Federal Communications Commission, U.S. Census Bureau, World Bank and Statista, July 2014. Note: Adoption rates are based on household ownership except for cell phone and smart phones, which are based on ownership per capita.

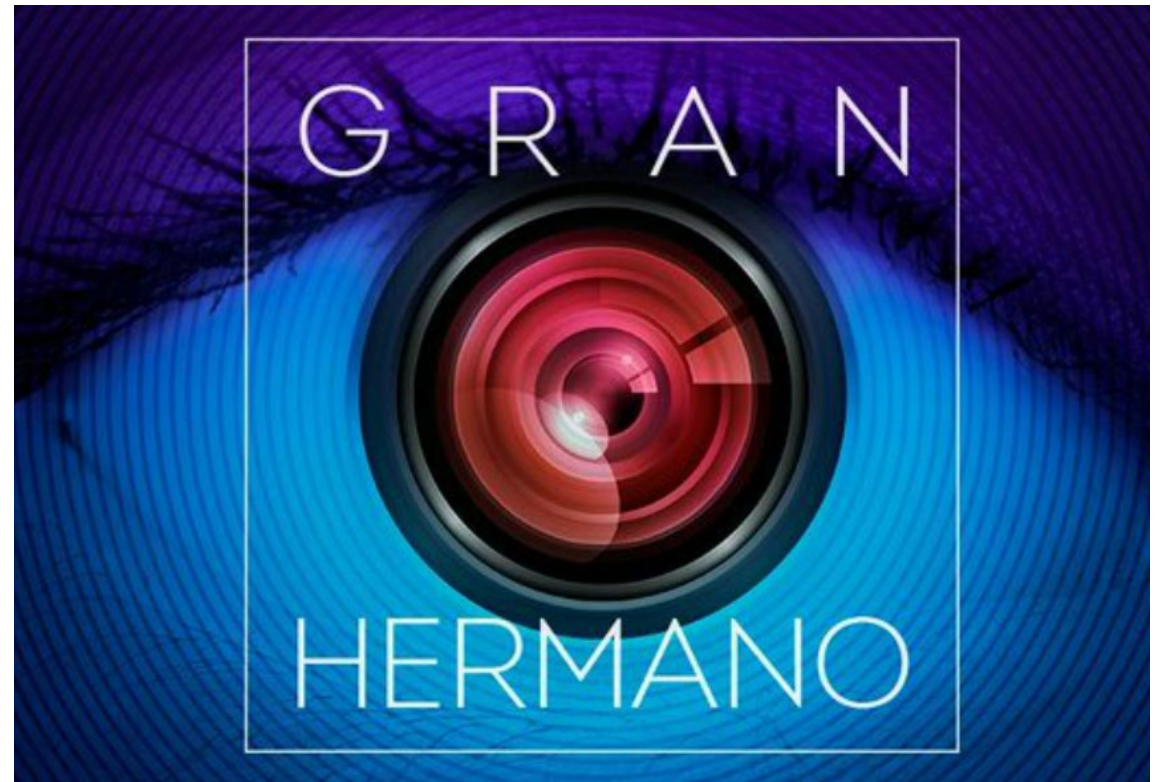
ChatGPT Sprints to One Million Users

Time it took for selected online services to reach one million users



* one million backers ** one million nights booked *** one million downloads
Source: Company announcements via Business Insider/LinkedIn

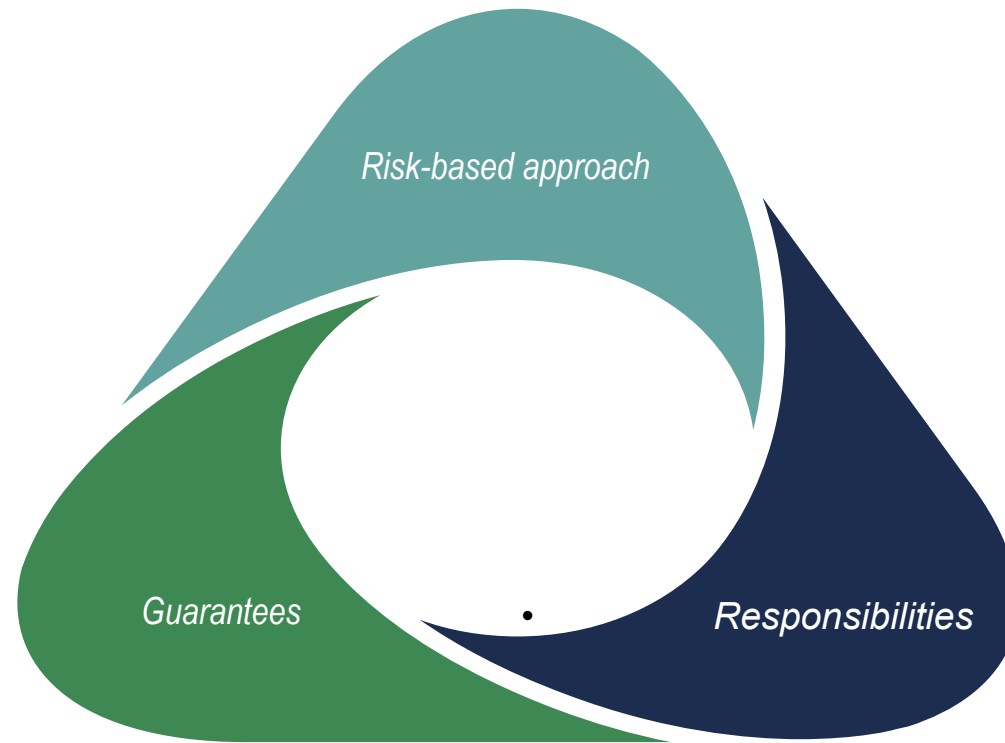
II. . Defining AI: The Golden Triangle of the AI Regulation



The broad business delegation to AI



Defining AI: The Golden Triangle of the AI Regulation



III. Selection Processes and Algorithmic Discrimination

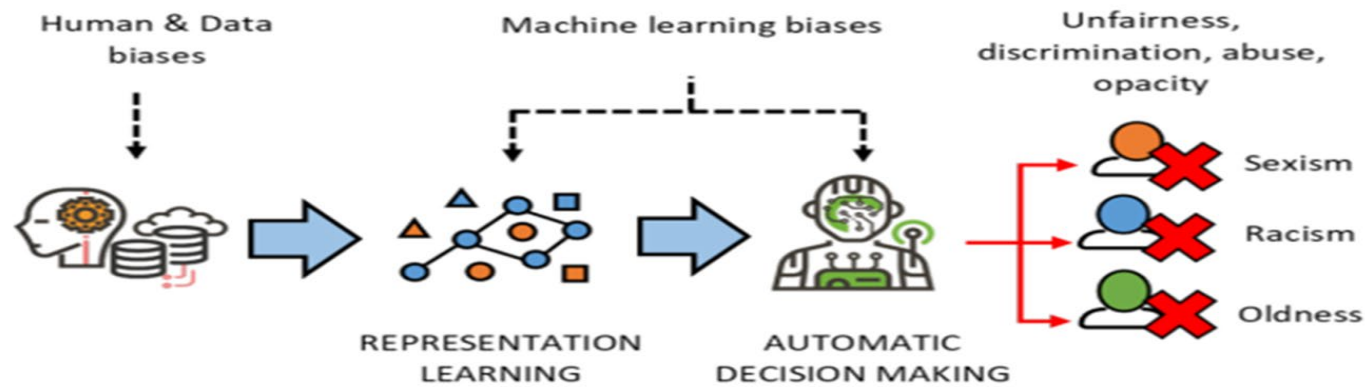


Selection Processes and Algorithmic Discrimination

They are considered high-risk (Art. 6.1 and 6.2, in relation to Annex III of the AI Regulation):

(a) AI systems intended to be used to make decisions on the recruitment or selection of natural persons, in particular for publishing targeted job advertisements, classifying and filtering applications, or evaluating candidates during interviews or tests.

Algorithmic discrimination

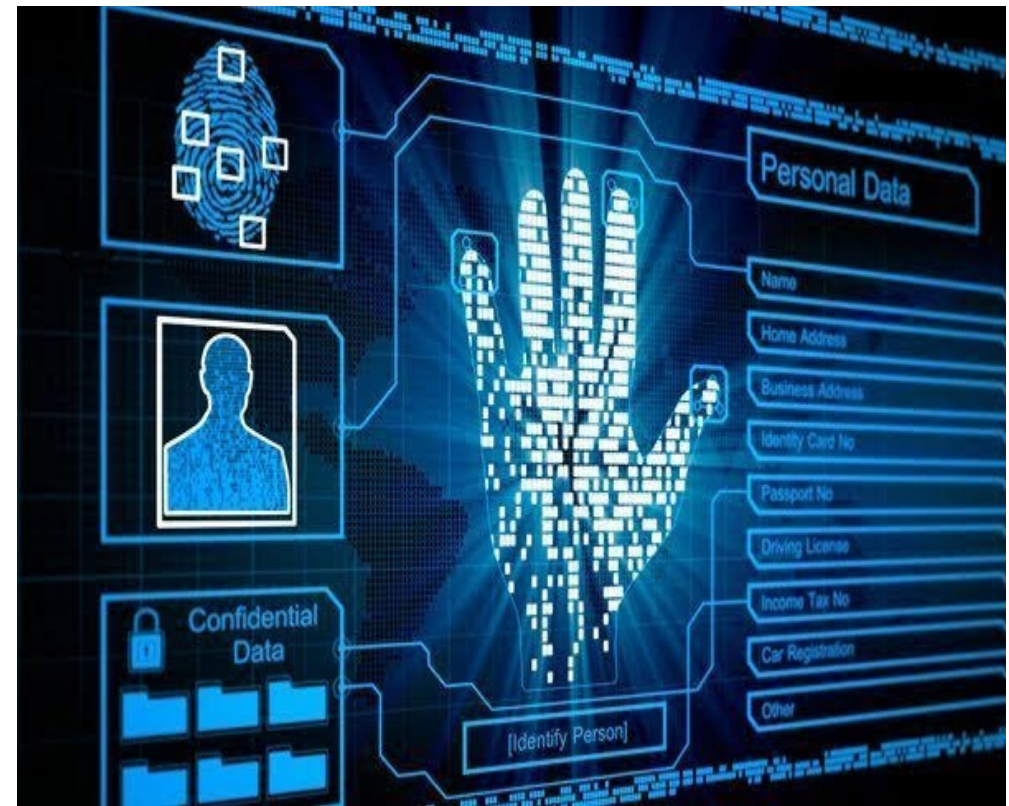


Algorithmic discrimination, AI bias, or algorithmic bias consists of the existence of systematic and repeatable errors in a computer system that lead to or generate discriminatory or unfair outcomes from a legal standpoint, such as favouring one group of users to the detriment of others. (Independent High-Level Expert Group on Artificial Intelligence, 2020)

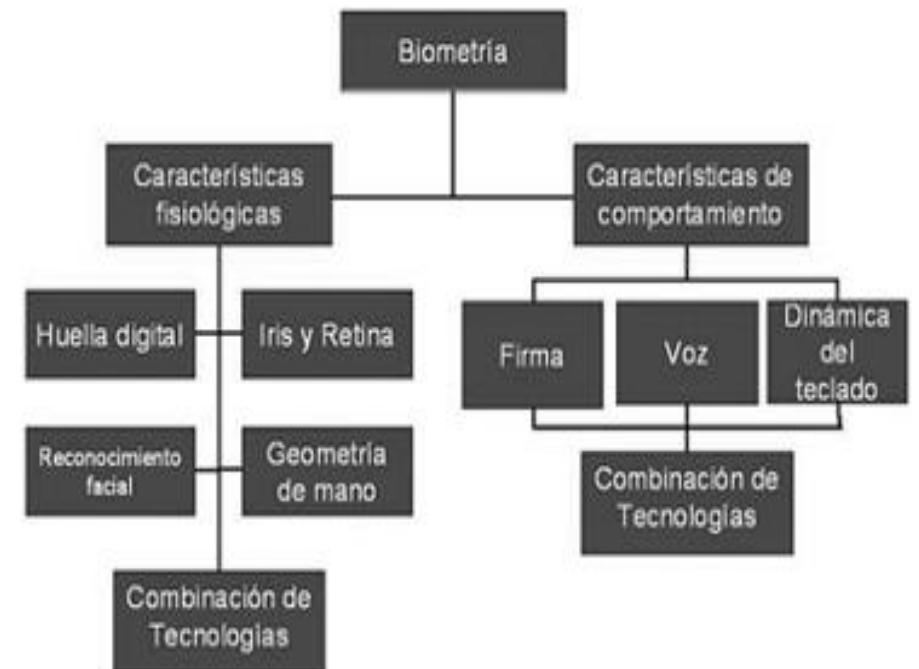
Types of algorithmic discrimination

- ***Discrimination through biased correlations or algorithmic mismatch:*** CV filters trained on historical hiring data that favour traits associated with one group (universities, keywords, career paths) and penalise underrepresented groups.
- **Proxy or substitution discrimination:** Scanning social media. ZIP code or transport routes. Statistical correlation between visiting Japanese manga pages and having good coding skills.
- **Discrimination by algorithmic grouping:** Selective gamification; behavioural assessments based on writing patterns, clicks, browsing speed, or biometric micro-signals that influence "cultural fit" or productivity scores.
- **Discrimination through negative feedback loops:** Evaluation based on top performers. Assignment of high-profile projects always to the same "high-potential" profiles defined by the model, reinforcing their performance and depriving others of key experience.

IV. Biometric Monitoring of Workers



Biometric techniques



El latido del corazón



Biomedical Signal Processing and Control

Volume 72, Part B, February 2022, 103335



ECGsound for human identification

Carmen Camara^a, Pedro Peris-Lopez^a  , Masoumeh Safkhani^b, Nasour Bagheri^{c d}

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Abstract

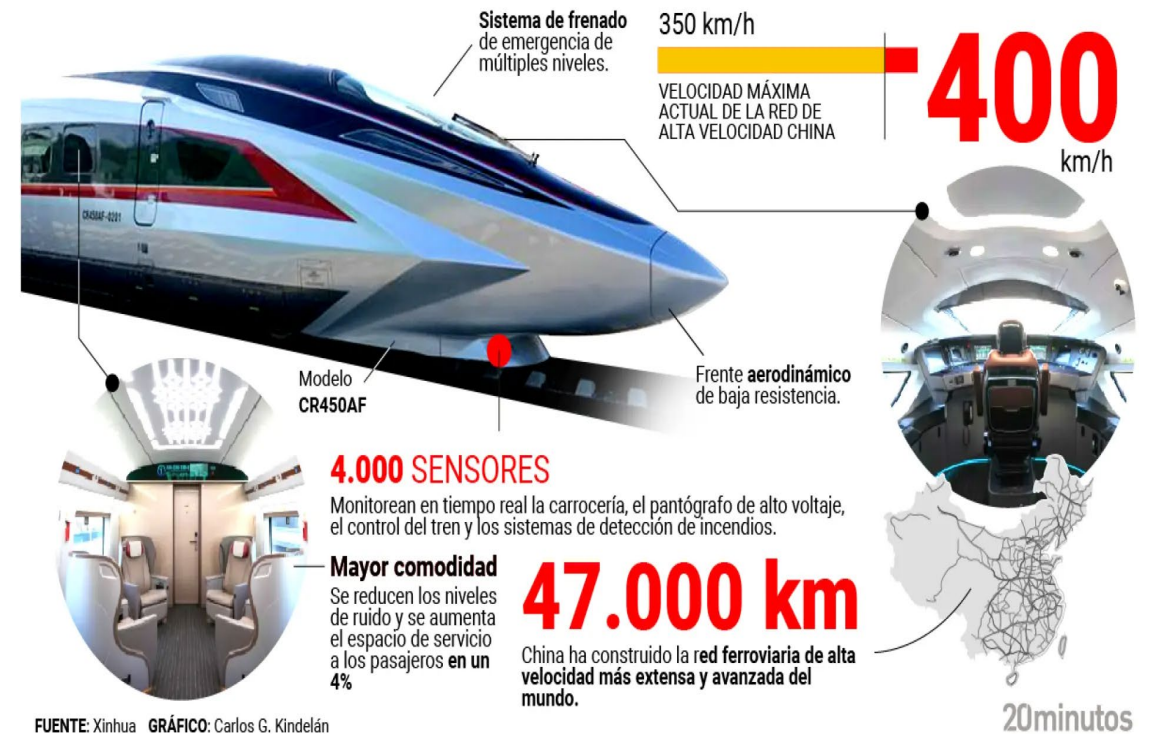
Neurovigilance



Photo: Deayea Technology

El nuevo tren bala chino superará el récord actual de velocidad

LOS PROTOTIPOS, CR450AF Y R450BF, SE PRESENTARON EL PASADO DOMINGO EN PEKÍN



FUENTE: Xinhua GRÁFICO: Carlos G. Kindelán

V. Algorithmic Termination Processes

TIEMPOS MODERNOS >

150 despidos en un segundo: así funcionan los algoritmos que deciden a quién echar del trabajo

Una empresa de 'software' prescindió el pasado agosto de cientos de empleados siguiendo únicamente el dictamen de una inteligencia artificial, un caso que podría convertirse en lo habitual



Algorithmically justified dismissal

The High Court of Justice of Catalonia held in its judgment of 16 October 2024 (Appeal No. 2759/2024):

The dismissal of an employee of a marble company is declared unfair, where the dismissal letter was drafted by an AI system. The judgment states that, "to top off the negligence," "it is indicated (...) that the company is engaged in the retail sale of clothing in specialised stores, which suggests that a dismissal letter from another company was copied, that a template was downloaded from the internet, or that its drafting was entrusted to the wrongly named artificial intelligence."

Termination using algorithms

Supreme Court Judgment of 25 September 2018 (Appeal No. 43/2018)

"It is difficult to conceive that the selection criteria, based on the workers' competencies (weighted by means of importance coefficients for each of them), established in the Skill Matrix application and with a new weighting of three values — versatility index (40%), number of operations for which the worker is qualified (40%), and number of certifications (20%) — could generate any kind of discrimination, and more specifically, discrimination based on union membership.

Towards an "algorithmic" compensation model

**El Gobierno trabaja en un despido
'restaurativo' por edad, género o renta**

**Trabajo apunta a un modelo de despido
con indemnización a la carta**

“El problema no está en la indemnización sino en las causas” afirma la ministra de Trabajo, Yolanda Díaz.

VI. The place of "collective consent" in the digital age: A veto on AI?



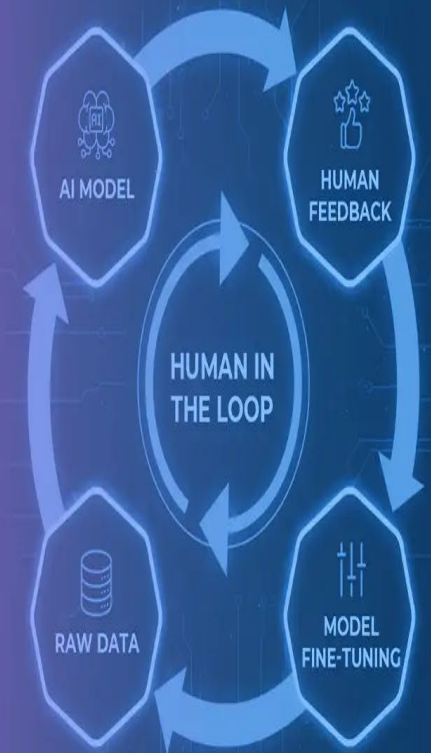
REPORT INTERNATIONAL COMMISSION OF HIGH-LEVEL EXPERTS ON DEMOCRACY AT WORK

INFORME
COMISIÓN INTERNACIONAL DE
EXPERTOS Y EXPERTAS DE ALTO NIVEL
SOBRE LA
DEMOCRACIA
EN EL
TRABAJO.



VII. Defining the Legal Status of the Human in Command

Human-in-the-Loop



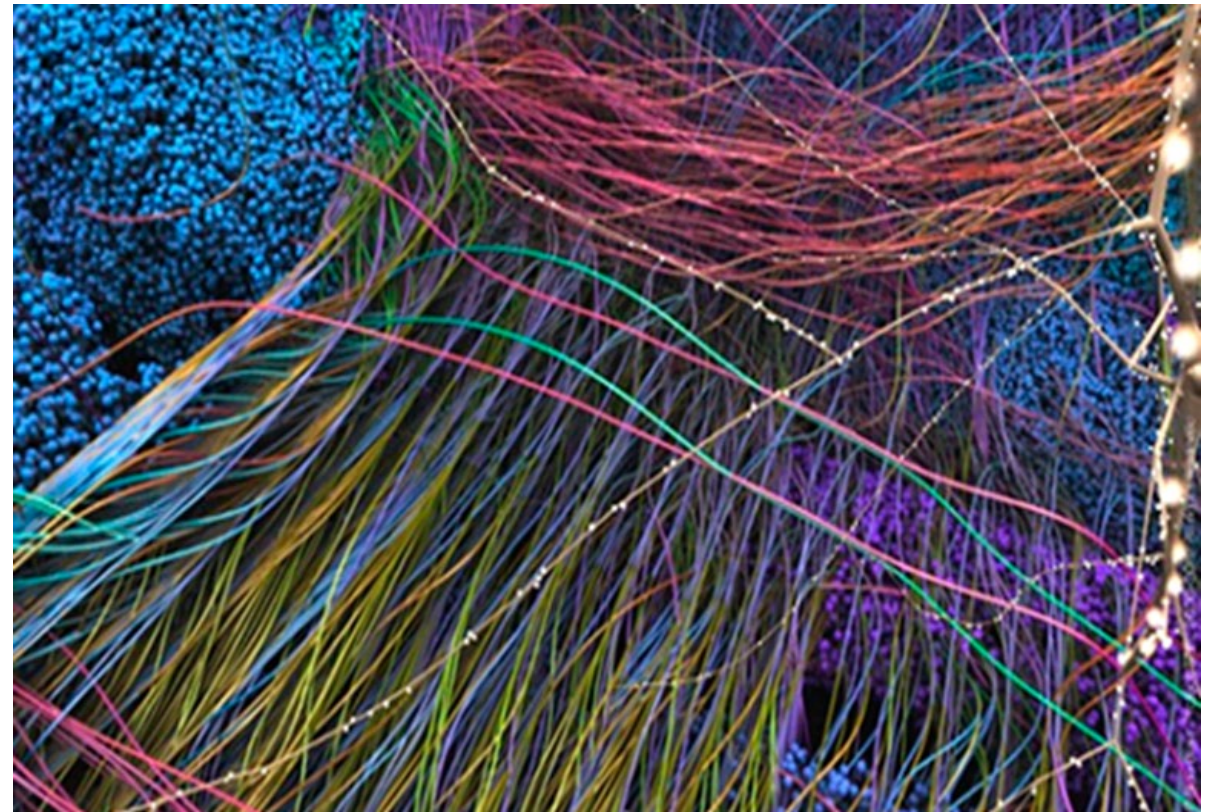
A Statute of Human Oversight?

Directive (EU) 2024/2831 of 23 October 2024 on improving working conditions in platform work

Article 10 — Human supervision of automated monitoring systems and automated decision-making systems

- 1. Member States shall ensure that digital labour platforms monitor and, with the participation of workers' representatives, periodically and, in any event, every two years, carry out an assessment of the impact of each of the decisions taken or supported by automated monitoring systems and automated decision-making systems on persons performing platform work, including, where appropriate, on their working conditions and on equal treatment at work.*
- 2. Member States shall require digital labour platforms to ensure sufficient human resources for the effective monitoring and evaluation of the impact of individual decisions taken or supported by automated monitoring systems or automated decision-making systems. The persons entrusted by the digital labour platform with the monitoring and evaluation function must have the competence, training and authority necessary to perform that function, including to override automated decisions. **Those persons shall enjoy protection against dismissal or its equivalent and against disciplinary measures and other adverse treatment in the exercise of their functions.***
- 3. Where, in the monitoring or evaluation referred to in paragraph 1, a high risk of discrimination at work is detected in the use of automated monitoring systems or automated decision-making systems, or it is found that individual decisions taken or supported by those systems have infringed the rights of a person performing platform work, the digital labour platform shall take the necessary measures — in particular, where appropriate, modifying or suspending the automated system — in order to prevent such decisions in the future.*
- 4. Information on the assessment pursuant to paragraph 1 shall be transmitted to the representatives of platform workers. Digital labour platforms shall also transmit that information to persons performing platform work and to the competent national authorities upon request*

VIII. New functions in the collaborative management of AI



New collective agreements

DELIVERY > TRIBUNA 

El convenio que nos falta: un llamamiento urgente para el futuro del sector 'delivery'

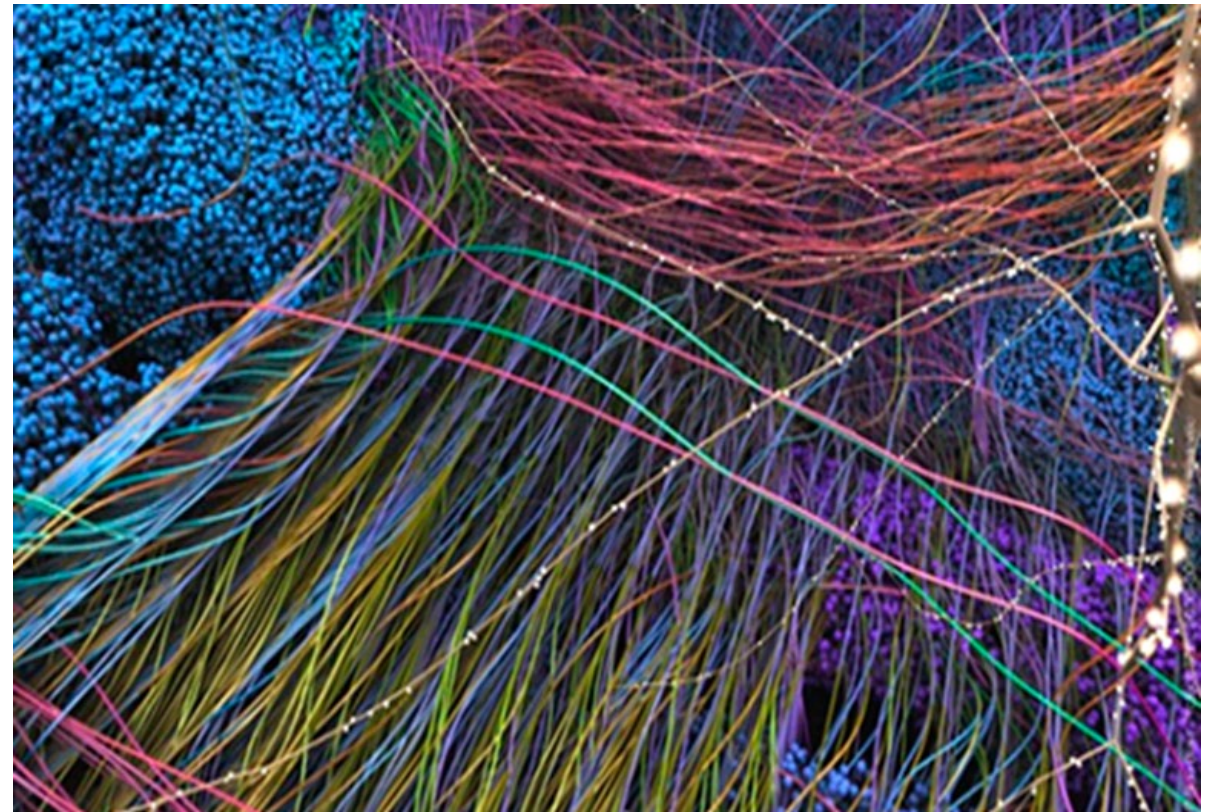
Es necesario que reconozca las particularidades de nuestra industria y balancee los derechos de los repartidores con las necesidades de flexibilización de las plataformas



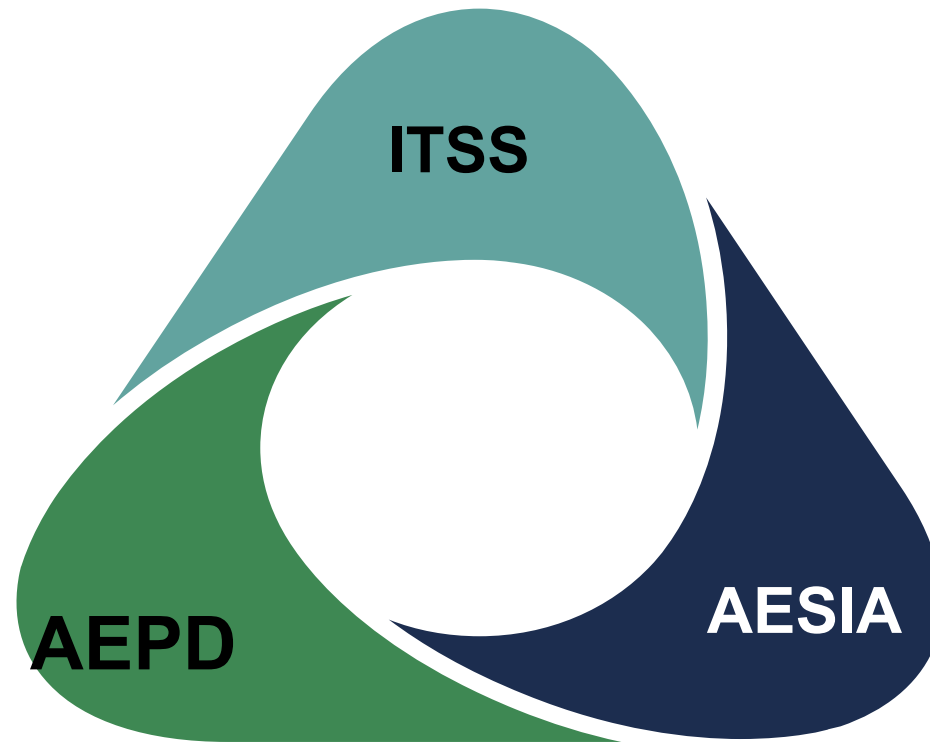
"Sandboxes": Falsifiable laws, falsifiable agreements

Spaces providing "a controlled environment that fosters innovation and facilitates the development, training, testing and validation of innovative AI systems during a limited period before their placing on the market or putting into service, in accordance with a specific testing-sandbox plan agreed between the prospective providers and the competent authority. Such testing sandboxes may include supervised testing under real-world conditions within them." (Art. 57.5 AI Regulation)

IX. Responsibilities for the Use of AI



Multiple supervisory authorities



Liability for the use of AI

Sanctioning subsystem

Civil liability for
damages subsystem



BOLETÍN OFICIAL DE LAS CORTES GENERALES

CONGRESO DE LOS DIPUTADOS

XV LEGISLATURA

Serie A:
PROYECTOS DE LEY

12 de junio de 2026

Núm. 97-1

Pág. 1

PROYECTO DE LEY

121/000096 Proyecto de Ley Orgánica para el buen uso y la gobernanza de la inteligencia artificial.

Civil liability for damages subsystem



Proposal for a Directive on the adaptation of rules on non-contractual civil liability to A



Directive (EU) 2024/2853 of the European Parliament and of the Council of 23 October 2024 on liability for damage caused by defective products and repealing Council Directive 85/374/EEC

THANK YOU