Universitat Oberta de Catalunya

Symposium Public Administration and the EU Proposal for a Regulation of Artificial Intelligence. September 2023

AI Act and human resources needs in public sector

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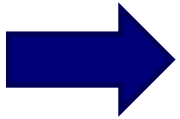
Ramon Galindo Caldés

The digital transformation of the public sector: how does it affect the public sector workforce?

Automated administrative procedures, RPA

Tasks are replaced using predefined rules.

Dramatic reduction of bureaucratic tasks



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Resizing of required HR?

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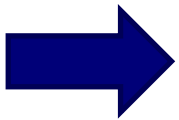
Need for updated and quality data, data governance.

New challenges: opacity, data protection, security, biases, etc.



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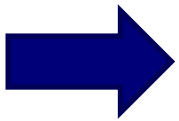
AI: autonomous decision-making

Personalised and proactive service provision.

Reduced implementation in the public sector (chatbots, etc.).



Is there an intervention reserve for civil servants? (Reserve of humanity (Ponce), HitL)

Is it possible a full automated decision?

Can AI improve HRM in public sector?

(Potential) AI functions in government (van Noordt and Misuraca, 2022)

Policy making	1. To detect social issues more quickly 2. To improve public policy decisions (and to estimate potential effects of policy) 3. To monitor the implementation of policy (and to evaluate existing policy) 4. To enhance citizen participation in policy making
Public Services	1. To improve the information services of the organization 2. To improve public service delivery to businesses and citizens 3. To develop new innovative public services
Internal management	**1. To improve the allocation of human resources** **2. To improve recruitment services of the public organization** 3. To improve financial management of the organization 4. To improve the detection of fraud and/or corruption 5. To improve maintenance 6. To improve public procurement processes 7. To improve organisational (cyber)security 8. Other

HR management in a public digital environment

- Large amount of data, but instrumental use through private software (or designed and implemented by private companies).
- Very limited use of data processing, strictly limited to management.

Is it possible to implement AI-based HRM in public sector?

Broad range of **possibilities** (automation of processes, planning, evaluation, process redesign, identify training or selection needs, etc.), but material, organisational and legal **limits**:

An AI-based HRM system is a **high-risk system** (Recital 36 AI Act proposal: AI systems used in employment, workers management and access to self-employment, notably for the recruitment and selection of persons, for making decisions on promotion and termination and for task allocation, monitoring or evaluation of persons in work-related contractual relationships)

It is possible for data-driven systems to detect needs and inefficiencies and recommend solutions... but final decisions must be made by (human) civil servants.

Training different types of employees

1. **Basic AI literacy** for all employees (or progressive according to tasks).

AI Literacy: new Article 4 b (Amendments Eur. Parl. 14 June 2023):

- 1. (…) promote **measures for the development of a sufficient level of AI literacy**, across sectors and taking into account the different needs of groups of providers, deployers and affected persons concerned, including through **education and training, skilling and reskilling programmes** and while ensuring proper gender and age balance, in view of allowing a democratic control of AI systems.
- 2. (…) measures to ensure a **sufficient level of AI literacy of their staff** and other persons dealing with the operation and use of AI systems on their behalf, taking into account their technical knowledge, experience, education and training and **the context the AI systems are to be used** in, and considering the persons or groups of persons on which the AI systems are to be used.
- 3. Such literacy measures shall consist, in particular, of the teaching of **basic notions and skills about AI systems and their functioning**, including the different types of products and uses, their **risks and benefits**.

2. **Specialised staff**, under specific selection rules

(not necessarily permanent staff or civil servant, selected according to their experience / specialisation, skills,...).

Risk of capture by private interest?

Growing role of private companies in digitalisation, automation and AI projects in public sector (particularly intense in the management of public human resources).

Do they only have a technical assistance role or are they defining public policies?

The risk of inertia: dependence or capture by companies (with their own interests):

> (…) *because **agencies** acquire these systems through government procurement processes, they and the public **have little input into—or even knowledge about—their design or how well that design aligns with public goals and values***. (Mulligan & Bamberger, 2019)

Instrumental role of private companies:

Need for personnel involved in the design, implementation, monitoring and evaluation of algorithms:

> *Public organisations should ensure the presence of **in-house knowledge on AI**, for the – partial or complete – internal development of the solution, for the direction and adjustment of the system developed by external suppliers and/or for ensuring proper management of procurement activities* (JRC, *AI Watch European Landscape on the Use of Artificial Intelligence by the Public Sector,* 2022)

Human oversight and AI literacy

Article 14. Human oversight

1. High-risk AI systems shall be designed and developed in such a way, including with appropriate human-machine interface tools, that they can be **effectively overseen by natural persons** during the period in which the AI system is in use.

Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT... COM/2021/206 final

1. High-risk AI systems shall be designed and developed in such a way, including with appropriate human-machine interface tools, that they be effectively overseen by natural persons as proportionate to the risks associated with those systems. **Natural persons in charge of ensuring human oversight shall have sufficient level of AI literacy** in accordance with Article 4b and the necessary support and authority to exercise that function, during the period in which the AI system is in use and to allow for thorough investigation after an incident.

Amendments adopted by the European Parliament on 14 June 2023…(COM(2021)0206 – C9-0146/2021 – 2021/0106(COD))(1)

Avoiding automated “human” decisions

(not high risk)

Automation

Generative AI (drafting, setting, consultation)

Article 16. Obligations of providers of high-risk AI systems

Providers of high-risk AI systems shall:

(a b) **ensure that natural persons** to whom human oversight of high-risk AI systems is assigned **are specifically made aware of the risk of automation or confirmation bias**;

(Amendments Eur. Parl. 14 June 2023)

Close relationship between administrative decisions and AI literacy

Selecting public employees: an activity... at high risk

(36) AI systems used in employment, workers management and access to self-employment, notably for the **recruitment and selection of persons**, for **making decisions on promotion and termination and for task allocation, monitoring or evaluation** of persons in work-related contractual relationships, should also be **classified as high-risk**, since those systems may appreciably impact future career prospects and livelihoods of these persons. (…) (Proposal…)

(36) AI systems used in employment, workers management and access to self-employment, notably for the recruitment and selection of persons, for making decisions **or materially influence decisions on initiation**, promotion and termination and for **personalised** task allocation **based on individual behaviour,** personal traits or biometric data, monitoring or evaluation of persons in work-related contractual relationships, should also be classified as high-risk, since those systems may appreciably impact future career prospects, livelihoods of these persons **and workers' rights**. (Amendments Eur. Parl. 14 June 2023)

Potential uses and limits in HRM in public sector

AI has **potential benefits** in public HRM in terms of **efficiency, economy, etc.**

AI systems can **improve public decisions** (better informed decisions).

… but we must bear in mind **some cautions:**

1. AI-based HR systems may be considered high risk systems

2. AI literacy is a key issue for all public employees.

3. An (**skilled**) human oversight is necessary in discretionary decisions… and also for the use of other AI systems that support or inform decisions.

4. AI-based selection systems could be an efficient tool… but has risks to be considered.

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Thank you!

rgalindoca@uoc.edu