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## STRATEGY FOR THE USE OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT IN THE PUBLIC SECTOR

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**Abstract:** In the third decade of the 21st century, the public sector in the era of the digital revolution and artificial intelligence is characterized by several specificities. The specificity of the public sector, in addition to other domains, is also reflected in the domain of human resource management. The purpose of this essay is to analyze the importance and specificities of human resource management in public administration. Such an approach to this matter assumes systematization and elaboration of the main challenges that public administration will have to face in the short and medium term in human resource management. In human resource management in public administration, several dimensions are imposed, of which the following stand out: a) the size of the administration in the public sector. b) the socio-economic aspects that direct the public administration and public authorities to adapt in accordance with the spirit of the new era. Indeed, today it is clear that the functioning and maintenance of public administration also requires significant budgetary resources. The obligation of every public administration in the era of digitalization and artificial intelligence is to adapt to the new conditions of strategic management. In order to bridge such a gap, the administration is obliged to understand the goals and technology of that process. This goal assumes the availability of certain funds and tools provided by public authorities, and to perceive the fact that it is part of a more global system. In this context, political support is important, which is often indifferent due to the absence of transferable, visible and tangible successes. Social networks have taught people to communicate, to exchange data despite different climates, reliefs, climates, borders or large geographical distances. There is a huge number of individuals from the public administration who own the Internet, are hooked on social networks and benefit from this technological invention in various domains. Although a large number of individuals from the public administration enjoy social networks, in their work content such a transformation is long overdue. The engagement of the public administration in this domain is determined by the strategic management of human resources. But previously, a certain political transformation is necessary in the direction of decentralizing innovation units, with an appropriate degree of freedom and own resources. It should be borne in mind that this process must be accelerated given that digital changes are very fast, and in such conditions a race between possibilities and reality is created. Only in this way will the trust and functionality of the state increase, which must stimulate the strategy of human resources management in the direction of improving digital capabilities.

**Keywords:** Digitalization, Artificial Intelligence, Public Administration, Human Resources Management (HRM), OECD

### 1. INTRODUCTION

The management of human resources skills and motivations, which represents a qualitative dimension, is coming to the fore, as opposed to the shrinking space for calculation, i.e. the quantitative dimension. In this way, the management of human resources skills and motivations is significantly evolving into strategic qualities. One of the more significant dimensions of human resources management in the public domain is the legitimacy and efficiency, i.e. the quality of the services provided. Public bureaucracy is legitimized in the perception of citizens as rigid and outdated. In the 21st century, citizens expect a modern and capable administration that successfully responds to the needs of citizens. Public administration is expected to provide tailor-made services, tailored to their specific needs. It should strive to work in the cheapest and most rational way. This attempt to mirror the current state of administration in modern European societies (Great Britain, France, Germany..) assumed the initiation of a large number of reform initiatives for a more rational, more efficient organization of public administration in the management of human resources of this corps. Human resource management is the most appropriate response to the challenge of digitalization and artificial intelligence in the 21st century. Thiétart, R.-A. (2022, 128p.) This transition to human resource management in public administration must be effected under the principled supervision of public authorities and authorities. "The integration of artificial intelligence into professional practices in the public sector is a guarantee of attractiveness for younger generations. » ,In this direction, at least four professions in public administration will probably be replaced in more than 90% of their activities due to the emergence of artificial intelligence in the most developed industrial countries of the EU in the period 2025-2027, predicts Berg. (Berg,J. 2024). Major transformations are expected in the profile of the administrative assistant, the manager responsible for employee salaries, the recruiter of new personnel and the compensation analyst. It is predicted that four professions with over 80% of their activities will be replaced due to the implementation of artificial intelligence in developed

European countries and the USA by 2034. This refers to human resources managers, internal trainers, work organization advisors and project managers for the attraction/commitment of agents. The use of artificial intelligence in the professional environment will also require the support of professionals in managing the pressure of digital activities in which preventive professions such as work cycle psychologists, ergonomists, occupational disease doctors, etc. will gain an even more important role in the work unit. "The main theme, for public administration and for human resource management in general, will be to understand and explain to what extent and what will be the use of human-like machines. » (Seramour,C.2023)

## **2. MULTILATERAL IMPLEMENTATION OF ARTIFICIAL INTELLIGENCE**

The use of artificial intelligence is possible in many fields of implementation in Human resource management (HRM), including:

- Attractiveness and recruitment: writing job descriptions, evaluating candidate skills and sorting applications, conducting automated video interviews with candidates, combating cognitive biases during recruitment, predicting potential candidate success, strengthening and supplementing and analyzing personal paths in the integration of job profiles
- Another field of implementation of artificial intelligence is Personnel Management: automating certain administrative tasks, tendons, planning schedules...;
- Training and skills development in: formulating contextual training recommendations, developing a pre-customized application, printing, providing real-time feedback, identifying emerging skills for improvement, and monitoring and evaluating the progress of employees and officials;
- Loyalty and commitment: analyzing the results of in-depth surveys that are sometimes very extensive and tedious, predicting departures, personalizing social benefits, improving recognition/reward systems, mentoring and career development, improving organizational culture...;
- Performance and management: analyzing goals and results and reporting on them, analyzing feedback from agents and users, planning and identifying job replacements, identifying hidden skills, forming interdisciplinary teams...;
- Quality of work and employee life (QVT) and mental health: analyzing data to measure the well-being of agents, analyzing relationships between colleagues, establishing personalized action programs in favor of employee well-being, measuring the return on investment in implementing actions in favor of well-being, early detection of mental health problems ..."

These tasks mainly fall within the scope of the OECD's forecast and recommendation. (OECD (2019) Generative AI also finds its place in job descriptions used by many private companies that have automated administrative tasks thanks to AI, which works very well, especially in terms of recruitment (where AI. AI is able to detect inconsistencies through CV analysis and advise on personalized training for specific profiles. It is known that the largest companies massively use AI for skills management, finding talent and people with a rich future and career. » Therefore, it is now considered that the use of AI supports rather than replaces human work, on tasks specific and inexhaustible for a profession. It therefore seems less premature to consider, for example, that AI tools can be entrusted with the entire implementation of a process of advanced job, workforce and skills management (GPEEC). To clarify the possibilities of using artificial intelligence in Human resource management (HRM) the civil service, a survey was conducted with an inter-ministerial potential network for human resources between December 2023 and January 2024 and led to the following conclusions:

- The main benefits expected from the use of artificial intelligence in Human resource management (HRM) are: saving time for managers and human resource departments; expanding fields for analysis; optimizing the HR service offering; anticipating developments; facilitating the work of managers and HR services; personalizing the HR service offering; improving the state of agents; the best accompaniment to agent dissatisfaction; harmonizing HR processes; articulating different HR tools and processes; developing a forward-looking approach in HRM. "You are now used in functions publicly for recognizing data and behavioral motives for the purposes of prediction and producing interaction supports with people."( Sedjar, A. (2021)

## **3. THREE POTENTIAL TOOLS**

Further analysis of the results of this research allows, in accordance with the goal of rationalizing the production of digital technology tools in the state, to unify the different use cases of artificial analysis and to single out three potential tools of Human resource management (HRM) (Dony, S./Maurel, Ch 2022, 9-31,pp.). In this case, artificial intelligence is used depending on the nature of the target users:

- "Virtual trainer" (for agents):
- Desirable functions: contextual training recommendations; personalized learning;
- Possible functions: personalized board path; personalized career path; feedback from operations are monitored in real time; mentoring and career development; personalized program of actions in favor of well-being.
- "Digital management assistant" (for managers):
- Desirable functions: writing job descriptions;
- Possible functions: assessing the skills of candidates; identification of hidden skills; combating cognitive biases during recruitment; monitoring and evaluation of agents' progress; analysis of goals and results; analysis of feedback from colleagues and users.
- "Digital HR support tool" (for HR managers):
- Desirable functions: analysis of internal research results; identification of emerging skills;
- Possible functions:

included succession planning of positions; training of interdisciplinary teams; analysis of data to measure agent well-being; personalized- provision of social benefits; monitoring and improvement of organizational culture; measurement of return on investment of actions in favor of agent well-being. The use of artificial intelligence requires adaptation of the organization of work and management. Furthermore, if artificial intelligence creates significant challenges for managers, it also creates conditions for “augmented management”. Artificial intelligence could in fact gradually free managers from planning, organizing and coordinating tasks, not least through the optimized management of their mailbox, an otherwise time-consuming process. In this scenario, only the command would escape generative AI for the moment. Artificial intelligence will also likely evaluate the expertise of managers, the source of their traditional legitimacy, and invite them to create a new legitimacy based on their general skills (soft skills) and their authenticity. Artificial intelligence will finally call on managers to demonstrate more insight, wisdom and critical sense, which requires courage and confidence in their choices and decisions based on artificial intelligence. “The question of the use of artificial intelligence also raises the question of the evolution of the quality of work and the quality of the service provided. (Bellivier, F.2020)

#### **4. IMPLEMENTATION CONDITIONS**

The use of artificial intelligence in general, and even more so in the world of work, requires (i) knowledge and mastery of the data used and that it is used legally and ethically, (ii) knowledge of the capabilities of artificial intelligence tools that may be limited in terms of logical reasoning or reproduce or create bias and discrimination, (iii) to select the tasks that artificial intelligence tools perform and those performed by humans. In doing so, artificial intelligence must assist in the work of the employee and replace him, (iv) and to provide support to officials in the appropriation and use of artificial intelligence tools and (v) to understand, control and master the produced results (which may be biased, limited and reliable, but not necessarily correct) as well as their use. These goals must structure the management of artificial intelligence in work organizations whose guiding principle must be human responsibility for the use of artificial intelligence. Therefore, human intelligence must accompany the use of artificial intelligence to make it safe and useful for human work or in other words "the more digital there is, the more we will need people". (Lamri, J./Barabel, M./Meier, /Lubart, 2022) Managers will have a role in raising awareness among their agents for the ethical and transparent use of artificial intelligence. The civil service of Human resource management HRM must equip itself with a strategy for the use of artificial intelligence. The elements previously exposed lead the (General Directorate of Administration and Civil Service) to propose, in a logic of symmetry of attention, a strategy for the use of artificial intelligence in Human resource management (HRM) in the civil service. From the above-mentioned issues, the principles can be grouped into three major themes: • Agent and administration protection: legal use and transparency of data (private and sensitive); robustness and security of AI; • Human control: consultation and autonomy (repairing the framework for use in collaboration with staff representatives; declaration of the use of AI by agents; freedom of agents to use AI tools or their results); • Ethics: transparency, justice, fairness, diversity, inclusion, non-discrimination. These principles serve as guiding principles for the use of AI in human-centered Human resource management (HRM) (Seramour, C. 2023),

#### **5. ARTIFICIAL INTELLIGENCE: IN THE PUBLIC SECTOR HRM**

To apply these principles in the implementation of artificial intelligence in (Human resource management (HRM), a framework is necessary to be used for the three axes Integration and use of AI: • Identification of those responsible for artificial intelligence technologies and methodologies; • Identification of the functions that can benefit from artificial intelligence (management, commercial stability and finance, IT, communication, logistics, etc.); • Identification of the missions that can be performed with the help of artificial intelligence; • Definition of the objectives (possibly quantified) to be achieved for the structure and its human resources using artificial intelligence. Improving productivity, solving complex problems...; Choosing reliable tools and software for artificial intelligence so that you can control the results and thus ensure the accountability of officials in the domain of public and administration. It is also necessary to define AI and data exploitation methodologies; It is necessary to create an obligation for officials and agents to notify as soon as the use of artificial intelligence begins; • It is necessary to establish a map of risks associated with the use of artificial intelligence in public HRM (Human resource management (HRM) as well as control and audit of the internal aspects of the strategy. According to the experts of AI GPEEC (The AI GPEEC 2020 is Europe's largest closed specialist trade fair for security authorities with more than 530 exhibitors from 30 countries and the latest supporting programme of conferences, workshops and training sessions: It is necessary to determine the human resources fields that justify the use of artificial intelligence and the selection of tasks that are entrusted to artificial intelligence and those that should continue to be the result of human work; • In this direction, it is necessary to carry out an assessment of the current and future needs for human resources skills in artificial intelligence as well as the necessary complementary skills; • It is desirable to carry out

an assessment of the effects of artificial intelligence on human resources professions and jobs; It is also necessary to attract and recruit profiles trained in artificial intelligence to support the regulation of its use. Asked about the Intelligence Emploi project (2018-2022) which led to the adoption of its charter for the ethical use of AI, Pôle Emploi, Benoit PARIS, ( Army Corps General, Deputy Director of Human Resources of the Ministry of the Armed Forces), specifies: "In this context, we understood that ethics could serve: as a pillar to support our work around 7 major families of capacities that allow artificial intelligence to grow within the framework of Pôle emploi: ethics, change management, skills and expertise, data management, technological foundations, methodologies and committees, ecosystems; as a compass to structure the approach that will prioritize the work. ".( Dony, S./Maurel, Ch (2022, 9-31,pp.)

## 6. CONCLUSION

The reform of public administration and its management in new conditions faces several challenges that must be overcome. Our era is characterized by enormous changes in the structure, living standards, social and health coverage, the emancipation of women, gender equality, protection of various groups with different sexual orientations, a decline in the birth rate, an aging population, and an extension of life expectancy. In parallel with the advancement of tools for acquiring knowledge and communications, there has been an explosion of social networks, digitalization in all domains, increased participation of artificial intelligence, the creation of new needs and habits of new generations known under the nomenclature of the Alpha generation to those of the C-generation, relatives during the pandemic. Societies are divided along multiple lines (ethnic, cultural, religious, ideological, rural and urban, etc.), which imposes the issue of dialogue between different communities. In this direction, citizens also demand more services from public administrations in terms of information. For its part, the globalization process creates a certain reflex towards public administration in terms of the economic and social dimension. New and modern jobs have been affirmed on the labor market, women have filled a new space of engagement, but also the emergence of larger social ghettos in megalopolises. What is worrying is the gradual impoverishment of the administration, the rationalization of the administration and the insecurity of its status. Modern societies need further training and support for public administration. For this purpose, acculturation and training of civil servants, human resources to the implementation of artificial intelligence and its uses according to various institutional campuses, as is the case with the DINUM digital campus; • In this, it is necessary to create a framework of rules at the intersection of human resources ethics and digital ethics in the management of human resources of public administration; It is recommended to support civil servants in their renewable responsibilities and in the development of their activity in the use of artificial intelligence. It is desirable to propose an evaluation tool that supports the thinking of project managers in their work on the development of services using artificial intelligence as well as the creation of a network of people from the administration who will be in charge of ethics and empathy. It is recommended to create a platform for warning about the misuse of artificial intelligence. "The adoption of frameworks for use is crucial even if for reasons of membership of civil servants but also of sovereignty, especially of data".

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