

Transforming Romanian society in the age of digital talent. The role of human resources.

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Abstract

Smart administrations are not only about digitization and the move towards smart cities and e-government systems, which is why the objective of this paper is to highlight the role of a human resource to face the challenges of new technologies, especially the role of digital talent in supporting the transformation of public administration, as well as the role of citizens as direct beneficiaries of the services offered by public administrations. Their importance in the public sector cannot be analysed without also highlighting the implications for the professionalisation of human resource management. The use of artificial intelligence and new technologies has a direct impact on all those involved in the process, and their successful implementation depends on the ability of the staff and citizens served to exploit their full potential and keep pace with developments. It is necessary for Romania to adhere to European values, in the spirit of building sustainable, digital and green communities that increase the quality of life of the beneficiaries. From this perspective, it is significant to analyse the situation in Romania, giving an overview of the future of public administration, but also of society as a whole, in terms of the role of digital talent and a digitally educated population in the transformation of society in relation to the latest technologies. To the detriment of ongoing studies and research on the subject, the transition to smart government is an expanding topic, which is why studies have not been exhausted and require constant updating.

Keywords: digital competitiveness; digitalisation of public administration; digital education and training; technological and social evolution; new trends in public management.

1. Introduction

The reform of public administration with a view to the transition to a sustainable society is a topical and interesting subject, as it is an area that faces all citizens of a state.

In an era of constant change and evolution of technologies, public administrations cannot show indifference towards trends and be directly influenced by them. From this perspective, they must be responsive and have the capacity to innovate with the purpose of meeting the challenges they face [1], especially in terms of human resources and the professionalisation of their management. Human resources are an essential element of the functioning of the administrative system, directly affected by digitisation, smooth functioning, performance and trust of citizens in the administration as a whole being highly reliant on them. Also, the efforts of public administrations to evolve in the spirit of new technologies need to be supported by a well-trained internal and external human resource (beneficiaries) that can harness the full potential of the digitisation of the administrative system. [2]

In a general perspective, smart public administration means the use of modern technologies to increase quality, efficiency and effectiveness, but even if the technological aspect is most often addressed in the literature (digitization of services, smart cities, e-government concept), the role of human resources cannot be neglected, both from the perspective of the human capital of the administrative system and from the perspective of the citizens who form the community served, the beneficiaries. The convergence of these two dimensions is

of particular importance for theorists and practitioners because it fosters the strengthening of the administrative system and creates the prerequisites for the development of a sustainable, qualitative and green society. [3]

Education, training and development of human resources is essential for future sustainable societies. Attracting and training digital talent in public administration is fundamental to meeting the challenges of digitisation and the use of artificial intelligence, and is a key element of social and economic development and increased competitiveness [4], and with them human resource management must be adapted.

Thus, the literature poses challenges for the scientific community, namely identifying the role of human capital in shaping smart government and exploiting the correlation between digital literacy and the professionalization of human resource management in the transformation of society.

Even if it is a topical subject, increasingly found in the strategies and measures envisaged at European level, the subject of digital talent in public administration and its link to the green transition for the development of a sustainable society is not very often analysed in the literature, as it is a relatively recent concept.

Goals such as "quality education", "sustainable cities and communities", "peace, justice and effective institutions" are among the 17 Sustainable Development Goals of the 2030 Agenda [5] and outlines directions that public administrations should consider taking in order to meet the current needs and expectations of citizens and lead to an increased quality of life.

Digitisation and the use of artificial intelligence impact everyone involved in the process, which is why it is necessary to determine new trends in human resource management and identify the role of human resources in community resilience.

With the labour market moving towards digitisation, the term digital talent will be the focus of the future workforce, but the uneven development of digital skills has led to a global digital talent gap that needs to be addressed through education and training so that digitally talented people in a country are identified, trained and supported. For this reason, action should be taken in close cooperation between public administration organisations, educational institutions and business. [6]

To cope with the effects of digital transformation and drive government digital maturity, the *OECD Framework for Digital Talent and Skills in the Public Sector* [7] emphasises the importance of creating suitable working environments and developing the related skills. This topic is also addressed in other documents generated at EU level, such as the *European Commission's New Human Resources and Greening Strategy* [8], a document that can be a relevant source of inspiration and good practice in European countries, but also in national documents such as the *National Recovery and Resilience Plan (PNRR)* [9][10].

The inclusion of this topic in numerous national and international strategy and development documents draws attention to the topicality of the subject and the measures to be taken in order to foster the sustainability of communities through digital talent.

2. The transition to smart government and the role of human capital

Public administration is a set of administrative bodies, specific to modern society and responsible for the socio-economic and political development of a country [11]. In its complexity, public administration encompasses public authorities, institutions and entities whose objective is to meet the essential interests and requirements of members of society at both national and local level. This set of organisations ensures the continuity of the state and local communities, which is why it requires constant improvement and adaptation to current social realities. [12] Public administration can also be seen as an entity comprising all human and material resources, with the purpose of ensuring the execution and enforcement of laws. Its endowment with material, human and informational resources creates the necessary prerequisites for the execution of the decisions of the political authorities as translated into law. [13]

From another perspective, public administration is seen as a human collectivity whose activity is carried out for the benefit of other people, a theme from which the human element is particularly important. The effectiveness of the administration is therefore directly influenced by the quality and technical capacity of the people who make it up, the value of which is reflected in the quality of the administration, which could not be achieved without adequate training and continuous improvement of the entire human resource that makes up the administrative system. The availability of valuable material and financial resources cannot compensate for the lack of professionally unprepared officials who would not perform their duties and would waste the resources made available. [14]

The role of the public sector and governments is strongly influenced by the challenges of globalisation, increased mobility of people, technology, societal, demographic and climate change. To cope with these changes, the administrative system needs to encompass authorities and institutions that are strong, stable, agile, flexible and open to change, and is under constant pressure to develop citizen-centred public services. [15]

Christopher Pollitt and Geert Bouckaert have selected five components that they see as fundamental to what administrative reform entails, relating to finance, personnel, organisation and performance measurement, transparency and open government [16]. The preoccupation of administrations with the reform of human resource management has only become predominant at the end of the previous century, and among the Member States of the European Union the directions of action have been quite different [17], but in a broader sense, better management of human resources means improving the climate in which they carry out their tasks, developing a proactive attitude, training staff and ensuring good collaboration in order to ensure constant and permanent development of the administrative system [18].

Another definition found in the Romanian literature is that "public administration reform strategies aim to identify measures to ensure the modernization of public administration in

order to optimize the decision-making process, improve the management of human resources, public finances and the quality of public services by promoting and introducing specific elements of quality management". [19].

Even though academic studies show that the relation between smart public administration and the application of new technologies and innovation, with regards to smart cities, bolster its efficiency, in order for it to be understood in its complexity we must consider the five dimensions that it encompasses: technological, political (the dualism between government and society), legal (within the law and its limits), subjective and structural (seen as a network). From a technological perspective, administrative systems are using modern solutions facilitated by new technologies to perform their tasks more efficiently and effectively so as to increase the quality of services provided to beneficiaries. The subjective dimension is made up of two basic elements, namely the human resource in public administration, seen as the central element, and the beneficiaries, the individuals who make up the community served. [20]

3. The age of digital talent. The relationship between digital education and the professionalization of human resource management in the transformation of society

The digital age is having a significant impact on society, bringing major changes to public and private institutions and organisations. Knowledge and use of information and communication technologies (ICTs) is a much-needed skill to be acquired by the whole population, given their widespread use in everyday activities. A harmonious development of the administrative system could not be achieved without strengthening its IT component and training all parties involved in the process, both citizens and the business environment and its employees. [21]

Human resource management, especially in the public sector, will face significant challenges in the future. Among the trends identified in the doctrine we can note the need to train leaders, train people in order to increase employability, reprofessionalisation in order to train human resource (HR) professionals. Thus, investments in human resources, such as their training and continuous development, are expected to increase employability and respond to the need to constantly acquire new skills in relation to current realities. As for HR departments, they need to be made up of specialists so that they are strategic partners of managers in implementing HR policies in line with current trends. [22]

Digital transformation is shaping the future of organisations around the world and looks at the changes brought about by the use of new technologies, impacting the way business is done in the public and private sector, as well as the expectations and needs of customers, partners and employees. In line with the constant changes of the digital age, HR structures have a key position in rethinking the future of work, recruiting and retaining a workforce with the right knowledge and skills. For this reason, some organisations have created a specific function or generated initiatives to support digital transformation. Retaining talent in the organisation and recruiting new talent is a common concern for employers, as they aim to identify and hire the human resource with the skills needed to face the next decade. [23]

The digitisation of public administration presents a multitude of opportunities that should be exploited in institutional strategic approaches and promoted by its leaders, generating advantages by forming institutions that have the capacity to deliver innovative services and products to beneficiaries. Digitisation provides an optimal framework for establishing a direct and dynamic relationship between the administrative system and citizens, developing administrations that can respond in line with their real expectations, thus increasing their trust. Digital transformation requires decentralised and integrated digital services that encourage this interaction to be effective. Contrary to the preconception that the digitisation process would lead to the total replacement of traditional public services by non-interactive services or electronically operated forms of personalised services, this process does not minimise the role of human resources but aims to develop new skills, competences and abilities needed to provide responses adapted to the new digital paradigm. The process of change and transformation could not take place without a broad process of developing digital competences and skills in the public sector and educating the population. This is precisely why the European Commission is taking steps to increase the number of citizens with access to digital environments, to increase the number of people with digital skills and to harness the strategic potential of institutions for digital transformation. [24]

However, EU Member States face challenges such as attracting digital talent, low number of digital prodigies, lack of cybersecurity readiness, trust in digital transformation and the lack of investment. Human resource management needs to adapt to focus on leadership to foster talent and generate a culture of innovation. A skills shortage will impact both public and private organisations and disrupt the global economy. [25]

To address the effects of digital transformation and drive government digital maturity, the *OECD Framework for Digital Talent and Skills in the Public Sector* incorporates ideas on the need for digitisation in today's society and the specific skills that digitisation requires, outlines the right environment to foster digital transformation, and charts the path to a digital workforce that attracts, develops and retains talent. To make a success of digital transformation, one should not wait for its impact on human resources to be felt and only then take appropriate action, but consider a proactive approach to investing in skills, training and education. [26]

All these transformations must be undertaken in line with respect for common principles, values and rules, eliminating the risk of infringing human rights. Governments must provide services accessible to all without discrimination. Thus, training and encouraging vocational training in relation to new technologies aims to increase accessibility and create new prospects in the labour market, without harming them. [27]

4. Transforming Romanian society in the age of digital talent

As can be seen in Figure 1, a study in 2021 [28] places Romania at the bottom of the European rankings in terms of digital skills for the 16-74 age group, which is not at all favourable, with a percentage of 28%, compared to the EU average of 54%. Digital skills indicators are part of the key performance indicators in the context of Europe's Digital Decade and the EU's "Digital Compass" which foresees more than 20 million ICT specialists by 2030 (gender convergence), at least 80% of the population having basic

digital skills and a digitisation of public services (100% online key public services, 100% of citizens having access to health records and 80% of citizens having and using digital identity). [29]

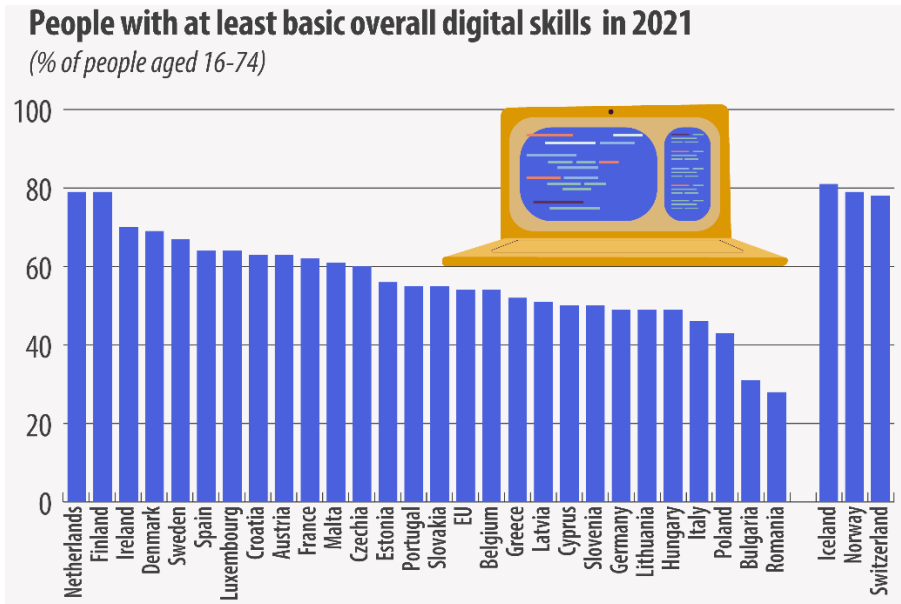


Fig. 1. People with at least basic overall digital skills, by country, 2021
Source: Eurostat, 2021 [30]

Also from a European perspective, Romania is at the bottom of the ranking for 2021 data (as can be seen in Figure 2) and in terms of the *Digital Economy and Society Index (DESI)*. DESI reports are based on Europe's Digital Performance Indicators and look at the progress EU Member States are making in the digital domain, including country profiles to help them identify areas where priority action is needed. [31]

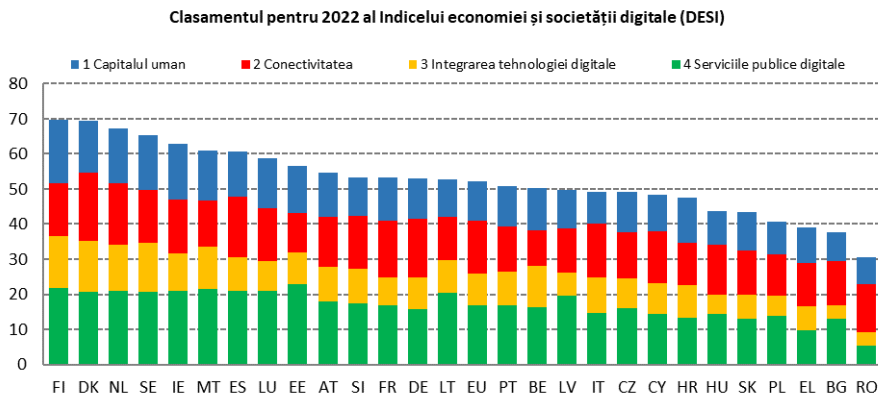


Fig. 2. Digital Economy and Society Index (DESI) rankings for 2022
Source: European Commission, 2022 [32]

With a score of 30.6, compared to the EU score of 52.3, the situation in Romania indicates the need to improve human capital, with a low level of basic digital skills. "Romania maintains its leading positions in terms of the proportion of female ICT specialists in the workforce (2nd place) and in terms of the number of ICT graduates, and it scores best for connectivity". However, Romania does not excel in the integration of digital technologies and digital public services. In view of this, a major change in the pace of digital skills training is urgently needed in Romania. [33]

Taking into account both rankings, by referring to the countries at the top, good practices can be identified that could be incorporated and adapted to the national context so as to allow an evolution of the Romanian digital society.

The future prospects of the Romanian administration in this area are shaped around the measures foreseen in the NPRR, especially in terms of the components related to education, good governance and digital transformation. The evolution of the education system is designed to correlate with the present and future needs of the labour market, ensuring a qualitative, modern and inclusive education process. Improved governance aims to lead to the delivery of quality public services by a professional and well-trained civil service that is able to respond adequately to the challenges, needs and expectations of citizens, thus strengthening resilience and adaptability to the green and digital transition. In the light of these challenges, there is also a need for effective human resource management in the public sector, including professionalisation through the development of digital, leadership and talent management/recruitment skills. A current challenge for public administration in Romania is attracting talent to the civil service, especially for entry-level positions. The digital transformation of the administrative system requires a coherent and integrated digital infrastructure that delivers high-quality digital services to all beneficiaries. Increasing the implementation of digital solutions in Romania will contribute to increasing the transparency of public sector activity, reducing bureaucracy, achieving sustainable development goals and, at the same time, increasing the number of citizens and companies that will be able to benefit and take advantage of the opportunities offered by digitisation. [34] These components of the PNRR are interdependent and require an integrated approach so that a sustainable change in Romanian society can be undertaken.

5. Conclusions and final considerations

Given the need for sustainable smart public administrations in relation to digital talent trends, the role of education, training and human capital development is paramount in transforming society. The setting of targets in the evolution process must be consistent with a full understanding of the concept of smart administration in its complexity.

Organisational adaptation to new innovations is essential for organisational resilience, especially in relation to human resource expectations and needs. To this end, working environments need to be increasingly attractive. New HR trends focus on increasing autonomy, fostering creativity and including digital talent. [35] At the same time, these changes require "intelligent leadership" that understands and acts on the new realities. [36].

The relationship between digital education and the professionalization of human resource management in the transformation of society needs to be examined taking into account the role of human resources in the resilience of communities and the impact of the use of artificial intelligence and the inclusion of new information and communication technologies on the people involved in the process. The transition to smart government could not be undertaken without digital talent.

Also, the more that is invested in education, training and human capital development, the more sustainable an administration will become. The transformation of society could not be achieved independently of increasing digital literacy, with a direct impact on the labour market and on the professionalisation of human resource management in the transformation of society.

Thus, the more digital talent is harnessed, the more the sustainability of smart governments will increase.

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