

Applications of human resources management electronically in International companies

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Summary:

The issue of human resources development in light of electronic management and the digital economy is of great importance to countries and governments that aspire to survival and continuity, especially in an environment where competition prevails, is governed by market mechanisms, and in which information occupies the leadership center, where there is no place for traditional institutions among the global institutions that have made the Internet and information technology a paper. They win by developing their human resources, and successful governments are those that do not allow ambiguity to hinder their movement and development.

In the other Hand; the accelerating pace of electronic transformation and business automation and the nature of the growing development in communication and information technology systems makes it necessary to think seriously and make a decision about joining the global transformation system towards using these technologies to facilitate, advance and improve the government work system for the human resource in Algeria and gain His satisfaction with improving the relationship with citizens and improving and rationalizing the management of available national resources.

Keywords: Keyword1 ; E.HRM, Digital Management ,E.Learning ,E.Gouvernement

Jel Classification Codes : O14; O32; O15

ملخص:

يكتسي موضوع تنمية الموارد البشرية في ظل الإدارة الإلكترونية والاقتصاد الرقمي أهمية بالغة بالنسبة للدول والحكومات التي تصبو الى البقاء والاستمرارية، لاسيما في محيط تسوده التنافسية وتحكمه آليات السوق وتحتل فيه المعلومة مركز القيادة أين لا مكان للمؤسسات التقليدية وسط المؤسسات العالمية التي جعلت من الانترنت وتكنولوجيا المعلومات ورقة رابحة من خلال تنميتها لموردها البشري. والحكومات الناجحة هي التي لا تمنح للغموض مجالا يعيق حركتها وتطورها.

ولعل تسارع وتيرة التحول الالكتروني و ميكنة الأعمال وطبيعة التطور المتنامي في نظم الاتصال وتقنية المعلومات يجعل من الضروري التفكير بجدية والقرار بشأن الانضمام إلى منظومة التحول العالمي نحو استخدام تلك التقنيات في تيسير النهوض و الارتقاء بنظام العمل الحكومي للمورد البشري في الجزائر وكسب رضاه لتحسين العلاقة مع المواطنين و حسن وترشيد إدارة الموارد الوطنية المتاحة.

الكلمات المفتاحية: إدارة الموارد البشرية الإدارة أرقمية التعلم الالكتروني، الحكومة الالكترونية

تصنيف JEL: O14; O32; O15

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I- Introduction :

The Human resource management underwent a significant transformation at the beginning of the 21st century, shifting from merely managing personnel affairs to developing human capital. Human resources have since become an unparalleled asset that drives organizational dynamism and strengthens its position in the future (Priyana, Budiart, & Gadzali, 2024, p. 1304). This shift underscores the importance of recognizing and investing in human resources as a key competitive advantage.

In this context, communication technologies and digital systems have played a pivotal role in these changes. Electronic human resource management in the government sector, for instance, encompasses the structures, decisions, and electronic processes used to deliver and perform HR functions. This includes online job postings and applications for recruitment, training and development using the Internet, multimedia, and simulations, salary payments through electronic banking systems, and communication and negotiations among employees, managers, and government entities via business networks.

Electronic human resource management in the government sector is now a practical application of information and communication technology (ICT). It contributes to enhancing employee competencies in public administration, fostering interaction, and aiding decision-making through accurate and transparent outputs. Furthermore, it facilitates collaboration, training, motivation, and participation within these administrations.

Based on this, the following central question arises: What is the current state of implementing electronic human resource management in international companies?

I.1. The Concept of electronic business in public administrations

In terms of origin, government e-business can be described as the effective integrated use of all information and communication technologies to carry out all government-related work with the aim of accelerating and facilitating its transactions, whether within the government agencies themselves or between them and those that connect individuals as auditors or business sectors.

The concept of electronic works is not only limited to technical aspects (Marker, Fisher, & .L, 2013), but also exceeds them to enter into the process of development and improvement of procedures, structure facilities, define roles, responsibilities and tasks of the government's employees at all levels, dealing with the prevailing cultures and improvement in providing service to the beneficiaries of them.

I. 2. The role and advantages of electronic and smart business services for the government:

It is necessary to think before establishing e-government about the desired benefit represented by the services that the government will provide to citizens and business institutions, whether it is providing information or through the interactive service through which the beneficiary can conduct transactions from wherever he is, through a computer connected to the Internet service without the need To go to the headquarters of the government department providing the service, and the services provided by e-government can be summarized as follows:

- **Damp Service:** It is the electronic window to provide information about the services and transactions that the government entity broadcasts to the citizen, and there is no possibility of interacting with the beneficiary.

- **Telex Service:** This occurs when the site provides multiple services that are more advanced, such as service fees that can be paid by the beneficiary.

- **Developing Service:** It is the complete application of e-government, where the website represents a live internal work environment that actually represents the environment of the administrative apparatus with the ability to meet all beneficiaries' requests through the website or electronic platform.

II– The Digital business and human resources development within government departments:

Digital technology has introduced a wide range of advantages and benefits to government departments, often referred to as "added value." The facilities provided by modern digital tools have significantly enhanced the capabilities and skills of employees across various fields. These advancements are particularly evident in improving access to required information at the right speed, strengthening effective communication between managers and subordinates, and enhancing control and monitoring of activities. Additionally, digital technology has contributed to achieving institutional goals more effectively. However, as an advanced technical approach, modern technology requires proper training and the improvement of workers' knowledge and behavior to ensure its optimal use (T & C, 2016).

1- The role of digital technology in human resource development :

Digital technology has made an effective contribution, to the point that it has become included among the effective indicators in the human development process, which is the degree of availability and control over this technology. Human competencies are built, their skills and abilities are raised, and they acquire new knowledge through the following:

- The stage of developing education systems and their basic requirements in research colleges and training centers ;

- The stage of training and developing the skills of individuals in various methods inside and outside the institution ;

-The stage of developing scientific research and applied research centers through new projects or developing what is available .

- The stage of providing systems Oversight information to evaluate the performance of employees within departments and institutions to determine the extent to which the set goals match the actual goals and to address negative deviations.

- There is 2. 56 % of companies worldwide have restructured their HR program to introduce digital and mobile technology.

- 3. 51 % of companies around the world have implemented digital technology in their various departments.

- Nearly 33% of organizations are using AI to deliver better human work.

2-The impact of digital management on improving the performance of the human cadre:

- The educational aspect: The use of remote learning techniques leads to the acquisition of basic knowledge of the basic knowledge faster, and in this says Andrew public from learning by the Internet enhances workers' skills, and provides them (Technologist, 2024) with flexibility that enables them to acquire new skills that enable them to change their jobs if necessary;
- Media and political aspect: The Internet works to deepen political awareness by letting people practice freedom of expression through the free press, and this phenomenon can be observed by increasing the preparation of newspapers and fields, in addition to the possibility of seeing all analyzes in various regions of the world;
- The economic aspect: The Internet revolution and information contributes to the success of economic development in a large way, and the internet contributions in this field include creating new economic sectors based on the continuous flow of information, and working to create new financial sectors and electronic trade electronic management.

3- E-learning and talent exchange in light of digital management :

Information and communication technology is considered one of the latest means that institutions have become dependent on in their field of work, so that information is available to everyone, meaning that the Internet has opened a field for distance learning and training .

Benefiting from the knowledge economy depends on the extent to which The speed and ability of the institution to use information technology in the learning process, which does not only mean using modern technology to reach comprehensive knowledge, but also means using it to communicate with others in order to exchange experiences and creativity. We find that the benefits that accrue to the institution by relying on this type of learning are limited to:

- Creating an appropriate environment for the development of knowledge workers, developing individual competence and a rapid channel for transferring knowledge;
- Achieving self-training and learning the required skills, training the largest number of workers at a low cost;
- The rapid spread of news, instructions and information, and obtaining the best possible solutions to the problems at hand.

IIV- Challenges of digital business management for the government sector in The Arab countries

The Human resources are among the most prominent elements that lead their societies to achieve progress and advancement in various fields. However, the shortage in the number of individuals qualified to adapt to the digital environment is something developing countries suffer from, and Jessup & Valacich (2006) confirm that the shortage in qualified human resources Dealing with the digital age is an obstacle facing institutions in practicing modern technology (Alqarni, Agina, & Authers, 2023, pp. 01-05).

Among the most prominent of these human obstacles are the following:

- Technological illiteracy: Technological illiteracy among workers within government departments is represented by the ignorance of quite a few of them about modern technological developments and their lack of knowledge in dealing with and using them, and through the low cultural and social awareness related to the work of digital administration (Abuhantash, 2023, p. 648).

- The language barrier: one of the restrictions that currently limits.
- Obstacles to change and innovation: Resistance to change and innovation is one of the most important obstacles facing most organizations. This occurs when working individuals are ignorant of the purpose and nature of change, as well as the fear of losing their current positions and jobs, which makes them, resist all change within government departments and institutions.

III- Results and discussion:

The results are presented through direct transcriptions and a pie chart. These findings are discussed under two main headings: the uses of E-HRM and the challenges associated with its adoption (Parry, Tyson, & S, 2011).

III-1 Uses of E-HRM

A variety of responses was collected. Respondents indicated that electronic human resource management (E-HRM) is primarily used for administrative purposes. This includes making employee records digitally accessible, organizing data more efficiently, storing databases, preparing reports, and ensuring compliance.

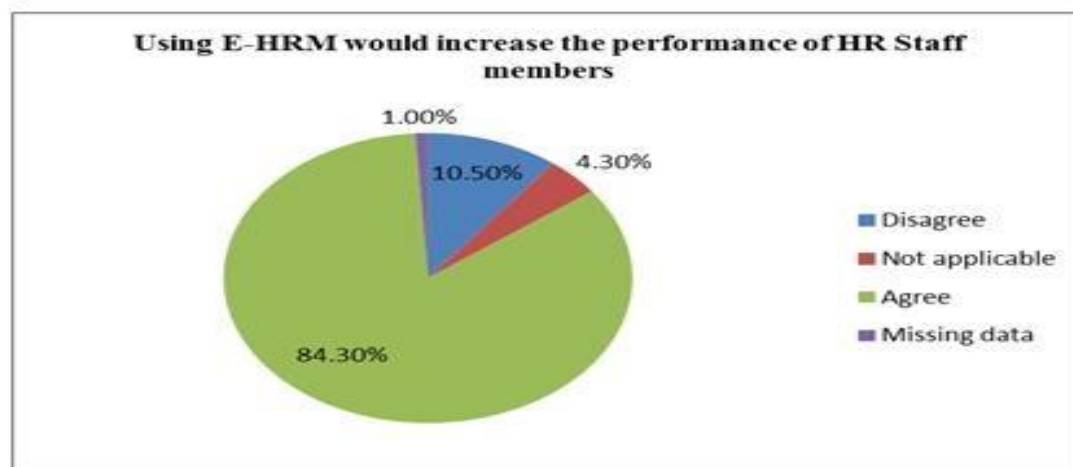
Additionally, respondents mentioned that E-HRM is used to store employee-related information such as CVs, service conditions (including salaries and benefits), qualifications, skill groups, leave records, and medical assistance details. E-HRM also facilitates performance management through electronic systems that track employee performance, conduct regular evaluations, and help improve productivity.

Moreover, it enhances communication between employees and management by using electronic platforms like email and instant messaging systems. Some respondents noted that it aids in analyzing HR data, such as employee headcounts, hiring and retirement rates, functional turnover, and compliance with local and international labor regulations. E-HRM ensures adherence to legal updates and streamlines processes related to employment and payroll.

Finally, E-HRM supports the preparation of reports on employment equity, organizational goals, qualifications, and self-service initiatives like career advancement. (Stone, D.L., Lukaszewski, & Johanson, 2015).

Other answers indicated that they use the electronic human resources management system for salary management (electronic payment) and e -learning (electronic training), which provides accuracy and reduces the action. It is also used to save records, record personal data and electronic employment. In particular, it is used to automate human resources and workflow. In addition, it is used to publish information related to the Foundation's policies and procedures.

The above answers are consistent with our conceptual framework (see Figure 1) that depicts the different impacts of using e-HRM in universities (S, 2013).

Figure 1: Using E-HRM Would increase the performance of HR Staff Members**Figure 2. E-HRM and HR staff performance**

Source: Yaser Mah'd Harazneh, The Impact of E-HRM Usage on HRM Effectiveness: Highlighting the Roles of Top Management Support, HR Professionals, and Line Managers, *Journal of Global Information Management*, January 2021 29(2):118-147, Arab Academics and Scientists Union.

Participants strongly agree (see Figure 1) that e-HRM enhances their performance. This aligns with Uren's (2011) findings, which highlighted a notable boost in the performance of HR employees. Similarly, Snell, Stoeber, and Lepak (2002) reported comparable results, observing significant improvements in HRM functions, particularly in cost efficiency and customer focus.

III-2 Improving digital human resources for digital transformation in the future

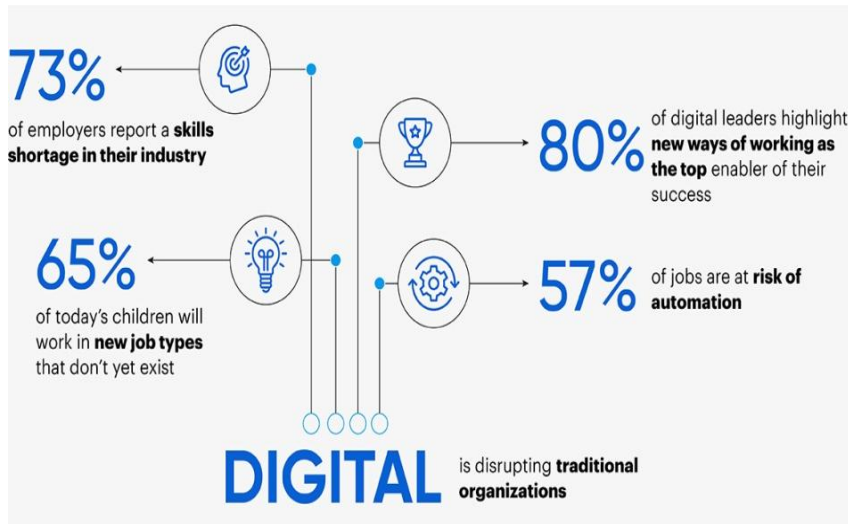
What are digital resources, and why are they crucial in today's world? The rapid pace of digital transformation has become a pivotal step in driving progress, unlocking new opportunities for companies to achieve substantial growth. This transformation demands the adoption of innovative tools and technologies to enhance the performance and capabilities of human resources (HR). By leveraging digital solutions, businesses can streamline their processes and accelerate growth.

One of the most notable aspects of this transformation is the integration of advanced HR systems, such as Human Resource Management Systems (HRMS). These systems consolidate essential functions—ranging from payroll to training and performance management—into a unified platform. They offer precise data analysis and easier access to insights, empowering companies to make well-informed decisions.

Additionally, automation powered by advanced robotics and artificial intelligence is revolutionizing the workplace. These technologies enhance employee productivity and improve overall business efficiency by automating repetitive tasks and enabling employees to focus on higher-value activities (Nosratabadi, Zahed, Ponkratov, & Kostyrin, 2022). Workflow and operational structures are being reimagined, freeing up human potential and fostering innovation. Meanwhile, advanced data and

resource analytics provide businesses with evidence-based insights, allowing for quick, informed decisions that boost service quality, productivity, and efficiency.

Figure 02: Statistics on the digital transformation of human resources management



Source : Bain research, World Economic Forum report

The challenges faced today are driving significant transformations in the workplace, emphasizing the need for a highly adaptable and flexible workforce that empowers organizations to remain resilient and grow, even amidst major disruptions. Mercer's "Global Talent Trends 2021" study highlights key areas of focus for strategic human resource management, including attracting, developing, enabling, retaining, and planning for talent succession. In Southeast Asia (Indonesia, Thailand, Malaysia, and the Philippines), the financial impacts and workplace disruptions have led employers to address future HR needs through diverse strategies, such as restructuring (48%) and effectively reskilling employees by 2021 (39%) to enhance job readiness. Additionally, 32% of organizations are prioritizing sustainable business renewal, underscoring corporate responsibility to society by aligning the interests of consumers, employees, and the environment.

V- Conclusion

In summary, organizations and public administration units must prioritize the recruitment, training, and continuous development of employees in this era of Industrial Revolution 4.0 to avoid falling behind. Retaining exceptional talent to enhance competitiveness in both local and global markets is critical, especially as human resources play an increasingly central role as a competitive advantage. The HRM unit should act as a strategic advisor to senior leadership and the board of directors, highlighting the workforce's impact on the digital transformation process. By doing so, HRM can help establish governance structures that facilitate faster decision-making and ensure uniformity in processes, tools, and metrics, particularly in areas such as benefits administration and labor management. As digital transformation becomes a vital strategy for an increasing number of organizations, investing in the ongoing development and training of employees is essential to fostering continuous organizational growth and value creation.

VI- Appendices:

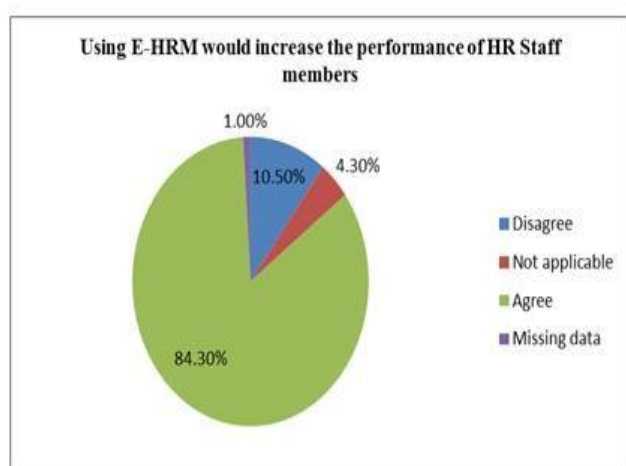
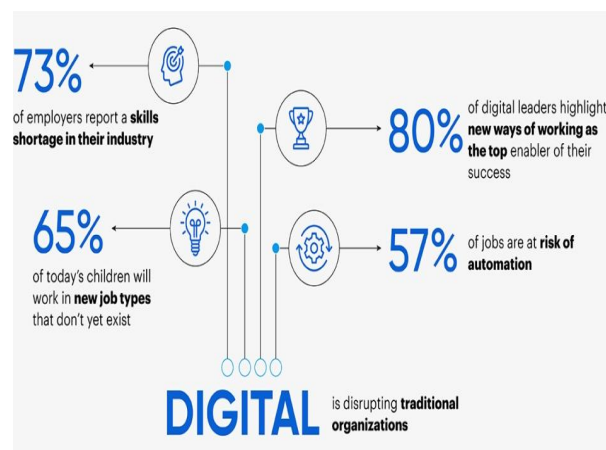


Figure 2. E-HRM and HR staff performance



Source: Bain research, World Economic Forum report

Figure 1: Using E HRM Would increase the performance of HR Staff Members

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