

# **THE IMPACT OF THE DIGITAL ENVIRONMENT IN THE CONTEXT OF HUMAN RESOURCE MANAGEMENT**

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**Abstract:** The analysis of the influence of digitization can be done starting from the relationships between the organization, managers and individuals. What must be mentioned is the fact that the organization plays a central role in this scheme, being the engine of the actions from which digitization also derives. Thus, the organization transmits through the managers the changes that will take place at the company level. They will play the role of promoter among the employees by conveying all the information related to digitalization with the aim of creating the last relationship between the organization and the employees. the organization has the role of conveying to managers the importance of digitization, what is its implementation strategy, the time allocated for their use and learning, as well as what are the resources available during this transition period. In this way, the company succeeds in developing its employees, ensuring that they acquire new knowledge and achieve the desired results by minimizing the time spent on daily processes.

**JEL classification: M11, M15**

**Key words: digitization, human resources management, work process improvement, impact, standardization, performance**

## **1. INTRODUCTION**

In recent years, we have witnessed an unprecedented development of work processes through digital transformation and the emergence of many new elements within companies. The evolution of technology creates the premises for the advanced digitization of activities with the aim of maintaining the competitiveness of organizations and ensuring an efficiency of the processes carried out by them.

A brief analysis of the processes taking place in many organizations today reveals that many employees are simultaneously in the position of digital transformation provider, actively working to improve processes, to digitize them, to actually implement the process, to track its progress and effects , in the delivery of trainings, but also in the position of a beneficiary who uses digital solutions to carry out daily activities and achieve the assumed objectives. Not infrequently, in such situations we can observe people's reluctance at the time of change, they have various fears about the digitalized future of their work. We find that there is a need for technical training of the human resource to interact with the new systems and to implement the digitalized solutions, that organizations must design or procure specialized trainings, that good communication must be permanently ensured between all parties involved In proceses.

At the moment, the most common terms regarding the digital economy are digitization and digitalization. Even if in essence they are frequently used as representing the same thing, a delimitation of them is important. Thus, the term digitization can be described as the process of converting a physical format into a compatible computing format, and the term digitalization is described as the process of transforming an analog signal into a digital one. Starting from the idea of the digitalization concept, we analyzed its effects, the influence within companies, the organizational changes it produces as well as the impact on human resources management. Thus, the general objective of the article was to identify the optimal level of digitization of processes and the influence of the digital work environment on the human resources management activity. The documentation undertaken and the analysis of existing data allow us to appreciate that the digitization of companies takes into account several factors, depending on the industry or field they belong to. What is certain is that current trends both highlight and force companies to take the big step towards digital. Even if at the national level, digitization is not yet present in a very high percentage, the European Union is making efforts in this regard to increase the level of digitization, both in the private and public space by adopting some laws. The level of education in the country must be adapted according to the new digital era, to support teachers and create an environment conducive to dynamic and efficient development.

The digital transformation of companies brings changes at the level of the following factors: social, technological and organizational. In essence, this digital transformation is under the sign of a change that involves on the one hand the evolution of means (IoT, the evolution of technology, the volume of data), and on the other the evolution of behaviors (accelerated implementation, rapid propagation, individualization) that aim to help, to support and continue the digitization process. Obviously, part of the benefits of companies following digitalization can be: increased internal efficiency, external opportunities as well as changes at the level of employees (their role in the company changes).

## **2. RELEVANT LITERATURE**

Within organizations, processes undergoing digital transformation are quantified and evaluated after implementation. In order for this evaluation to take place, we propose a series of models from the specialized literature. Firms and companies that want to minimize the time spent on certain processes such as production, presentation of services and products, employment as well as in the actual running of daily work. For all these processes, a period of transition to digitization is being prepared, to a way of doing things easier and faster with the help of software technologies, but also intelligent robots. The society that becomes a main consumer of digital products – we are talking about people's need to avoid queues for paying bills, interbank transfers, shopping. All this revolves around the word "online" and implicitly digitalization, having as strong "allies" the desire of people to do things as quickly, as conveniently as possible, with the aim of having the greatest accessibility and being located at "one click away" from everything they want sitting on the sofa. The state - it has an important role because it is trying to standardize the bureaucratic processes in the country by digitizing the platforms for submitting documents, as well as encouraging it for small and medium-sized companies to take the step towards this process. More than that, the massive investment in state personnel who benefit from adequate training to be able to truly respond to this challenge of change. In this sense, the development and implementation of digitized libraries, the involvement of young

entrepreneurs who work in the IT field and have proposed projects to improve the platforms of various state institutions can be seen as a prime example. It is no wonder that we are in a consumerist industry that can easily be identified as the "fourth industrial revolution" and that aims to provide all its consumers with higher productivity and more free time for other activities. This is also confirmed by Cummings (2020) who states that this revolution increases productivity, has positive effects for competitiveness, but an impact can also be felt in the labor market through the disappearance/creation of jobs.

A company's objectives can be met through the digital transformation process, involving the following elements (Potts, 2011):

- Internal efficiency – improving work processes and using digitized processes in order to rethink the business from a digital perspective;
- External opportunities – creating new opportunities from the external environment (for example: services, new customers);
- Major change – the digital transformation process can change a company's internal processes as well as employee roles.

Digital changes touch all the functions of a company, which is why all organizations must be aware of the importance of the improvements made in IT technology, but also the risks related to these transformations: increasing operational risk with increasing complexity, cloud storage, loss of information.

Shirky (2018) mentions some aspects to consider when organizations want to evaluate the success of implementing a technology. In the first instance, the implementation of new technologies has two basic dimensions: it depends on both the customer experience and the operational processes, the balance between them ensuring the success of the implementation (McDonald and Rowsell-Jones, 2012). The measurement of profitability in each field can be achieved by analyzing individual indicators such as: changes in income before and after implementation; improvements in operational efficiency (measured as a percentage); changes in customer relationships and organizations' commitment to them; the degree of adaptability of organizations as well as the flexibility of leaders and employees; the degree of utilization of information and the transfer of knowledge among the organization; By looking at the above aspects individually, we can get an overall picture of how much and how well certain technologies have been implemented.

Other authors draw attention to organizational change with the help of metrics: operational, process forwarders, services and costs, organizational, financial, (Roberts and Hunt, 2019). Bredin and Söderlund (2017) argues that resistance to change is recognized as one of the important factors that can influence the success of organizational change when change occurs at the level of innovation, technology, new policies and structure.

### **3. METHODOLOGY**

The research took place between January 2023 ÷ May 2023. The questionnaire used in the research was composed of 8 questions based on the criteria obtained from the focus group and aims to reveal the digitization threshold accepted by users. The questionnaire was distributed among the employees of 20 companies in Romania. The structure of the questionnaire includes, in the first part, questions to highlight the employees' opinion on the digital transformation through the lens of the following criteria: reducing the weight of routine activities, increasing work productivity, reducing the risk of error, additional skills needs, increased quality, managerial vision, costs, level of

motivation, using a Likert-type scale from 1 to 5, where 1 means "to a small extent" and 5 means "to a large extent". In the second part, employees were asked to tick the importance of the criteria on individual satisfaction and performance, using a scale from 1 to 5, where 1 means "not at all important" and 5 means "very important"

#### 4. RESULTS AND DISCUSSION

Following the results obtained, questions from 1 to 8 focused on employees' opinion regarding the digital transformation through the criteria: reducing the weight of routine activities, increasing work productivity, reducing the risk of error, additional skills needs, increased quality, managerial vision, costs, motivation level (Table 1).

**Table no. 1 Employees' opinion on Digital Transformation**

No.Crt.	Item	Average
1.	Reducing the risk of error in processes	4/5
2.	Increased quality of work	3.99/5
3.	Managerial vision	3.97/5
4.	Increasing labor productivity	3.95/5
5.	Share of routine activities	3.88/5
6.	The level of motivation	3.87/5
7.	Costs	3.86/5
8.	The need for new skills	3.75/5

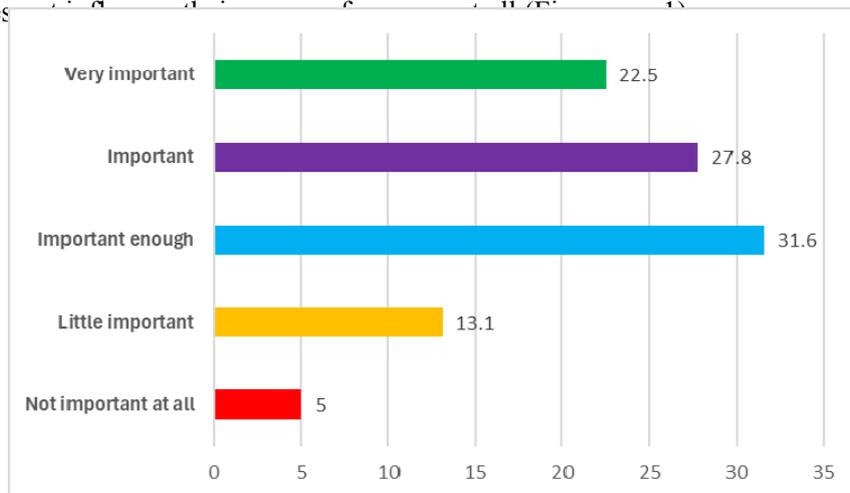
*Source: developed by the author*

In the previous table, the average was calculated according to the score given by each respondent for each criterion. The greatest importance that has been given to the above criteria is for reducing the risk of error in daily processes, increased quality of work and managerial vision. Respondents believe that digital transformation influences the first three criteria the most, giving them an increased importance on a scale of 1 to 5, and thus underline that in digital transformation the risk of errors is lower than in manual processes, the quality of the work being good. At the cost level, according to the respondents, a directly proportional increase will be registered.

In the middle of the ranking is the increase in labor productivity and the share of routine activities. This draws attention to the fact that employees are aware that through digital transformation the two criteria can bring multiple benefits in the work: the realization of a greater number of processes in the shortest possible time, the disappearance of routine activities, increased effectiveness. On the last three positions are motivation criteria, costs and the need for new skills, respondents giving them the least importance in the digital transformation at work - this can be explained by the fact that the HR department did not make enough efforts to support employees in the process of digital transformation and to motivate them in order to achieve these goals. Moreover, the need for new skills can be interpreted on the one hand from the perspective of young people who do not feel the need to receive training for the formation of digital skills, as they are already trained in this field, and on the other hand from the perspective of people who are more age that does not realize that the use of certain digital solutions also requires new skills.

Question 9 aimed to identify the influence of digital transformation on satisfaction and own performance through the lens of the 18 criteria identified following the focus

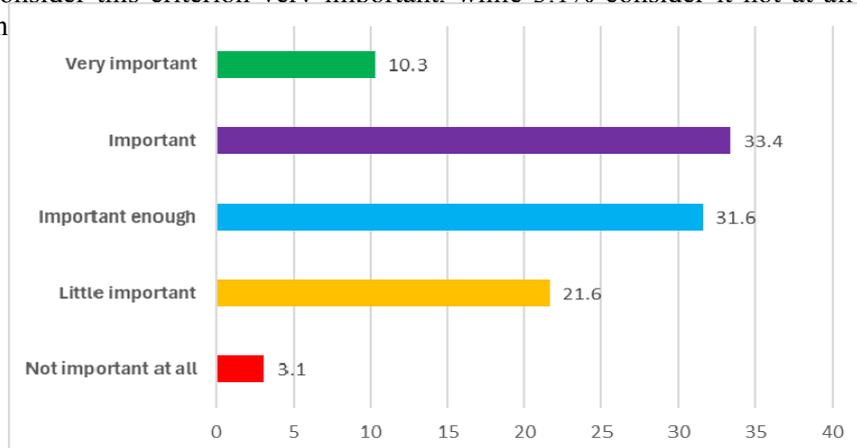
group. Thus, for the level of work quality, it can be observed that the respondents consider this criterion quite important and important in their own performance, registering percentages of 31.6% and 27.8% respectively. Only 5% of the respondents believe that this item does



**Figure no. 1 The influence of the level of work quality on own performance**

*Source: developed by the author*

The next criterion concerns the degree of strategic integration that the respondents considered quite important – 31.6% and important 33.4% for their own performance. Only 10.3% consider this criterion very important, while 3.1% consider it not at all important (Figure n



**Figure no. 2 The degree of strategic integration**

*Source: developed by the author*

The level of change criterion is also considered by the respondents to be quite important and important for their own performance, with 33.8% and 35.6%. This aspect draws attention to the fact that employees are directly impacted by changes in companies

and that this can affect their performance over time. Only a percentage of 1.9% considered the level of change not important. The risk level criterion is considered by the respondents to be quite important and important. This aspect demonstrates that the respondents are aware of the risks that digital transformations can have and that a period of process supervision is needed for the good performance of activities.

## 5. CONCLUSIONS

Digital transformation has brought significant changes in terms of human resource management in organizations. The impact of the digital environment in this context is profound and felt in several ways.

*First*, the use of technology in recruitment and selection has become more efficient. Online platforms, applications and analytics algorithms can provide detailed information on potential candidates, helping to identify the best talent for the organization. *Second*, the digital environment has facilitated internal and external communication. Employees can collaborate more easily, regardless of their geographic location, through collaboration platforms and online communication tools. Also, the relationship with customers and partners can be managed more effectively through a digital environment, which contributes to the improvement of services and their satisfaction. *Third*, performance management has evolved with the integration of technology. Employee evaluations, feedback and development can be monitored and managed more accurately through a digital environment. This enables the identification of development needs and the promotion of the professional development of employees.

The impact of the digital environment in the context of human resources management can be analyzed in detail from several perspectives:

*1. Recruitment and Selection*: the digital environment provides access to a global candidate database and CV and skills analysis tools. This allows the HR department to identify potential candidates more quickly and ensure that they select the people with the most suitable skills for the vacancies;

*2. Personal Development*: in the digital environment, there are many online learning platforms that offer courses and resources for the continuous development of employees. This helps them improve their skills and stay relevant in their field;

*3. Performance Management*: digital technology facilitates continuous employee evaluations and real-time performance monitoring. This allows managers to provide more frequent feedback and quickly identify needs for improvement;

*4. Internal Communication*: the digital environment facilitates internal communication in organizations, including through messaging platforms, emails and internal social networks. This helps improve collaboration and strengthen organizational culture;

*5. Data Analysis*: through technology, HR related data can be collected and analyzed in detail. This can lead to the discovery of trends and patterns that can guide the organization's strategic decisions regarding human resource management;

*6. Flexibility at Work*: digital technology allows employees to work flexibly, including remote or hybrid work. This can help improve work-life balance and attract talent from diverse places;

*7. Privacy and Security:* with all these advantages, it is important to pay special attention to security and data protection aspects. Handling highly sensitive information such as employee personal data must be a priority.

Overall, the digital environment has transformed the way organizations approach human resource management, contributing to efficiency and improving the employee experience. However, it is essential to keep up with technological changes and to approach data protection and privacy issues with care and responsibility. Following the research carried out regarding the evaluation of the level of digitization of processes in companies, we were able to draw a series of conclusions, based on the objectives of the research and its hypotheses. Following the questionnaire applied to a sample of 320 respondents, we obtained the following results: questions 1-8 were aimed at the employees' opinion regarding the importance of certain criteria that are part of the digital transformation. Thus, the most important criteria that were validated by the respondents were: reducing the risk of error in processes, increased quality of work, managerial vision. Moreover, increasing work productivity and the share of routine activities rank at half, indicating increased importance. What is interesting to note in this case is that all criteria scored higher than 3 (average).

Technological development brings changes in the Human Resources Management in terms of new ways of interaction and communication, offering the possibility of the appearance of new forms of employment such as those on projects, part-time, telework, contractors for a well-defined period of time. The technology of the human resources department requires that it evolve continuously, noting the need for new skills in this field, new forms of employment as well as flexibility and adaptability to internal and external factors that produce organizational change. Moreover, this transformation represents a clear challenge for both HR professionals and company employees. Industry professionals need to stay abreast of rapid developments, build on solid evidence, and proactively work with all parts of the organization to contribute to the success of a people-centric technology strategy.

Thus the new role of HRM is to balance the needs and expectations of the organization but also of the employees in order to ensure that any use of technology is for the benefit of both parties. Human resource management and information technology experts have worked together to create software and systems that transfer HR data and decision-making systems into the digital environment, implementing E-HRM applications. The advantage of introducing such E-MRU systems is determined by the fact that they will be more efficient, save time and money. Apart from this aspect, E-MRU ensures the possibility of applying online for vacancies, as well as the selection of CVs according to their relevance, ensures the conduct of interviews and the performance of tests and trials through special platforms that support people.

A well-conducted evaluation can help organizations determine whether technology initiatives are achieving their intended goals and whether they will continue to have the intended results well into the future. Success is conditioned by the existence of a systematic process of data collection, analysis and use of information with the aim of answering all the basic questions about the newly introduced technologies. More than that, it can be said that it is a process followed throughout its course with the aim of having the results that the decision-makers, financiers, developers, have proposed.

In conclusion, the success of organizational change from a technological point of view is fast, broad and has various influencing factors. That is why success is very

important and must be measured and evaluated accordingly by each company to see whether or not the measures taken have benefited both the organization itself and its employees.

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