

The role of digital transformation on the human resources (HR) function within organizations digital transformation as a leading role in human resources within organizations

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Abstract

The concept of digital within organizations is no longer seen as a novelty, however, the arrival of digital in the functioning of organizations, has raised a number of questions especially that of the HR function.

The objective of this work is to shed light on the digitization of the HR function at the strategic and managerial level, by responding to the following problem: What is the added value of the digitization of the human resource function and its role in the transformation of organizations?

Through this research, we will mobilize the theoretical approaches as well as the role that plays the HR function in the transformation in a global way of the organization, and then we will present the challenges and issues of the digital transformation of the HR function.

Keywords—*IJOA, Journal, Optimization: Digital transformation, digitization, HR function, organization*

I. INTRODUCTION

In the digital era, consumer uses and behaviors are evolving rapidly, induced by constantly renewed technologies, access to information, and behavioral changes. Digitalization is affecting in an extreme, violent and irrevocable way all fields of activity, regardless of their sector, and all generations.

If large companies have reacted quickly to integrate digital, many of them have remained attached to traditional internal schemes, investing little, these sleeping companies have not yet seen the emergence of this cloud of new uses come to stifle their activities.

If digital has been a priority for the management of very large groups for some time now, it is now one of the most important strategic imperatives for all companies, regardless of their size and sector of activity.

Faced with organizational change, the HR function is at the heart of this revolution, with the creation of a strong

digital dynamic in organizations by integrating the digital and its means of internal and external communication, about ten years ago, the term "digital" has substituted that of "digital" which operate transactions and operations from calculations on numbers hence the term digital to designate computer applications, accessible on connected objects (such as computer, tablet, ...).

The company no longer has a choice, the need to adapt to a new connected economy, to get ahead in a changing environment even if the technicality, costs, resistance to change are often brakes to the digital transformation of companies, facing this change of "business model", the HR function is at the heart of this revolution.

HR must manage this change and activate several levers at several levels in order to ensure this transition serenely, on the one hand to create a strong digital dynamic in the company by integrating digital at all levels and its means of internal communication, and on the other hand, to encourage and guide the appetite for digital through various practices by accompanying employees in the change by the implementation of instruments thought in line with the obligations of the company and each.

On another aspect, HR must also anticipate the needs of teams in terms of digital, in collaboration with other departments, human resources must therefore identify new skills to develop to improve work, project management, organization and consequently the competitiveness of companies.

Rossi (2018) in these researches raise the important element of the so-called company (of the future), the taking of place of new digital devices of management and organization is part of the daily landscape of companies for a decade such as the "information system, mutualization of functions, organization of processes", finally to respond to major developments that shakes the ecosystem of the organization at the level (economic, Bretesché (2018) for the author, it

is no longer just a matter of adapting or change as previously perceived, but substantial transformations and systems that affect both management systems that behaviors, relationships and professional cultures of organizations.

Therefore, Rowe and Besson (2011) argue that the transformation of organizations is primarily a "phenomenon" characterized by the "intentionality" of a global change, the concept of digital within organizations is no longer considered a novelty, however, the arrival of digital in the functioning of organizations has raised a number of questions, especially that of the HR function.

The digitalization of the HR function begins with its own transformation, this transformation starts from these processes (recruitment, training etc...), while playing a role of the basic function for the global transformation of the organization.

Our work is therefore a first step towards a better understanding of the digital transformation of the HR function in companies. It would explain how digitalization can lead companies to make organizational and managerial changes in order to integrate into an innovation process.

The objective of this work is to shed light on the digitalization of the HR function on the strategic and managerial level, which consists of an organization integrating digital technologies into all its activities, so that it is a powerful lever of differentiation and competitiveness within organizations and that is why we wonder in this work to know: **"The role of digital transformation on the function of human resources (HR) within organizations?"**

In order to provide an answer to this problem, our reflection follows the contextualist approach. This approach constitutes a particularly stimulating framework for analyzing the trajectories of projects in organizations.

To make this work more structured through two points: the first will address the digital transformation and HR: conceptual framework; the second point will be devoted to the challenges and issues of the digital transformation of the HR function. Our work will end with a conclusion in which we will try to provide some answers to the problem raised at the beginning, by mobilizing theoretical tools with some research perspectives related to the digital transformation of the human resource function.

II. DIGITAL TRANSFORMATION AND HR : CONCEPTUAL FRAMEWORK

Nowadays, digitalization represents an important strategic issue for organizations, in recent years, following the advent of new technologies and information technology in general, many companies have indeed decided to take action by digitizing considerably to take into account this change, it is essential to shed light on the digital before moving to the design of digitalization.

The digital transformation of the HR function involves, first of all, the digital transformation of the HR function itself, in its various processes: recruitment, training, compensation, skills management, etc. In a first approach, it can therefore be defined as the use of the potential offered by digital technology, through various digital HR solutions (already existing on the market or to be developed) to:

- ✓ Enrich the way HR tasks or processes are performed;

- ✓ The development and especially the democratization of virtual simulation in training and recruitment allows, for example, to offer new types of training (always closer to reality), as well as new possibilities to enhance the employer brand of a company (virtual visit of the premises, presentation of industrial know-how...);
- ✓ Transform the way HR tasks or processes are performed;
- ✓ The use of social networks has transformed the way of sourcing candidates by adding a set of communication channels to find and contact potential candidates. They are complementary to more traditional sourcing methods (school relations, trade fairs...) and have become essential for several years;
- ✓ Automate the way tasks or HR processes are carried out, RPA (Robotic Process Automation) allows to automate a certain number of tasks in the process of welcoming and integrating employees thanks to the use of algorithms that will automatically launch tasks to be carried out, such as pre- filling administrative documents, launching the creation of e-mail accounts, proposing e-learning modules to be followed for training.

1-1 DIGITAL TRANSFORMATION IS A CONCEPT THAT HAS EXISTED SINCE THE RISE OF THE INTERNET

The notion of "digital transformation" is a recent concept, which is gradually replacing the notion of digitalization. Since 2004, the term "digitalization" has been used and associated with the latest technological revolutions.

Beyond these technologies, digital transformation is associated with the company as a whole and takes into consideration not only technological innovations but also human capital and strategic dimensions, but how can we define digital transformation?

Since the 19th century, society has been profoundly affected by the Internet and new technologies. Today, digital transformation is revolutionizing our society, and is now an integral part of every company and every individual.

Digital transformation can be defined, according to Laurent Bour, Digital expert, as "the process of implementing a maximum of digital technologies available within their activities, for a better business and with a view to perpetuate the company.

Thanks to this revolution, companies are seeing the emergence of new competitors and a volatile consumer, and therefore a new consumer profile. They must more than ever develop strategic issues of transformation to remain successful and not leave the race: one of the most concrete and common examples of this revolution is the commonplace use of instant messaging and emails within a company, these tools have facilitated exchanges within the structure but also with the external world.

1-2 DIGITAL TRANSFORMATION: STILL A VAGUE TERM:

Digital transformation, also known as digitalization, is still a protean concept. Some practitioners characterize it as "the

changes brought about by digital technologies in all aspects of human life" (Stolterman and Fors, 2004).

The notion of digital transformation questions the nature of the evolutions made possible by the latest developments in the field of ICT (Information and Communications Technology), the different waves of technological development have all, to varying degrees, had a profound impact on socio-economic development and that of organizations, keeping in mind this historical dimension is necessary to avoid falling into the trap of novelty, digital transformation is not a new phenomenon: the expression (digital transformation) appeared for the first time in 2000 (Patel and McCarthy, 2000).

Moreover, all actors agree that digital transformation shifts value within sectors, whether industrial or service sectors, whether companies operate with industrial clients or in the general public sector. This notion of "value shift" had a hard time finding a place in the academic world, but it has now become one of the most studied concepts in the literature of economic sciences. At the same time, the digital transformation is redrawing the place of the human being in companies, all the tasks that can be automated are in the process of being automated, from the robotization of operations on automobile production lines to the automation of the tasks of office employees or cashiers. Robotization also allows for production on demand and the possibility of personalizing products and services: the formulation of the customer's request, the design of the solution and the automata that execute them, and finally the service, which consists of delivering to the customer. " (Landier et al, 2015). Reis et al (2018) identify aspects of digital transformation into three distinct classes :

- ✓ A technological aspect where digital transformation relies on the use of new digital technologies such as social networks, mobile technology, analytical or integrated tools (Fitzgerald et al, 2013)
- ✓ An organizational aspect where digital transformation requires a change in operational processes or the creation of new business models (Ross et al, 2016)
- ✓ A final social aspect or digital transformation is a phenomenon that influences all aspects of human life (Matt et al, 2015)

1-3 DEFINITION OF THE CONCEPT OF DIGITAL TRANSFORMATION

In the era of digitalization, flexibility and adaptability become a necessity for all companies, the basic definition of the term has remained the same, namely: "the use of all available digital technologies to improve business performance", the digital transformation will allow

companies to stand out and optimize their performance, thanks to the simultaneous use of different technologies.

Digitalization also refers to a total transformation of the company (Ross, et al, 2017), It aims both the speed of expression and the comprehensiveness of the transformation, compared to digital, digital refers to those in the corporate world have perceived the issue and acted accordingly, on the other hand the term digital is attributed to those who would not have made efforts or would not have understood the issue (Moatti, 2016).

However, a digitalization will only be complete after a transformation that allows the company to define and respond to customer needs and preferences more quickly and innovate to compete (Ross, Beath, & Sebastian, 2017).

The development of innovative products and services requires the deployment of an effective digitalization business process, which must guarantee a number of requirements: reliability, efficiency, security, and process discipline (Ross, Beath, and Sebastian, 2017), which are key factors for success in constantly changing markets.

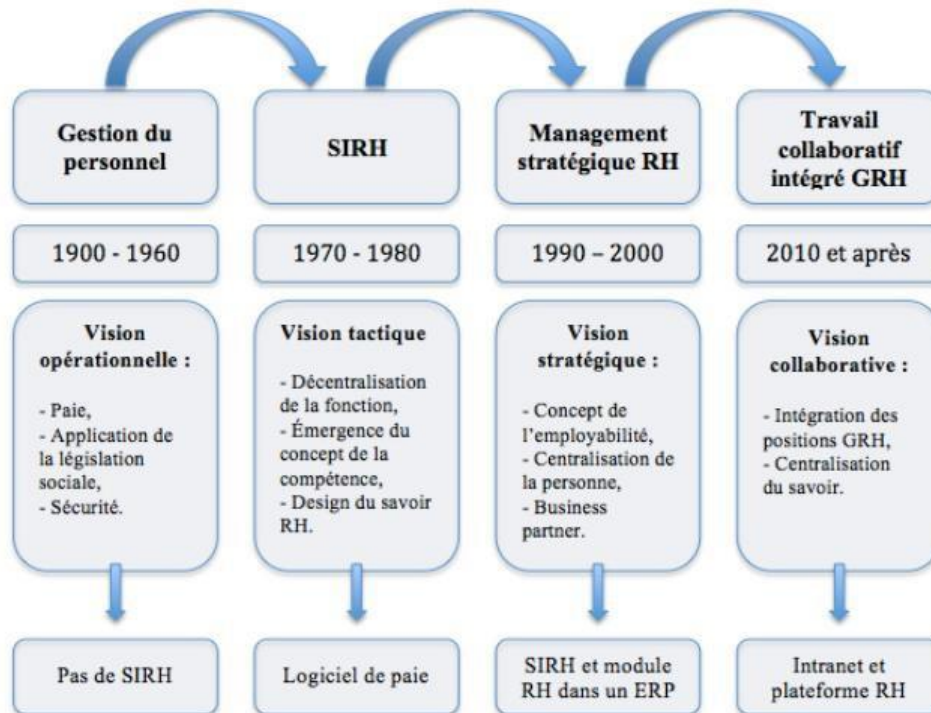
The development of innovative products and services requires the deployment of an efficient digital business process. The latter must guarantee a certain number of requirements: reliability, efficiency, security, discipline in the processes (Ross, Beath and Sebastian, 2017), these elements constitute the key factors of success in markets in perpetual mutation, we can consider the relationship between digitalization and digital transformation as reciprocal. Indeed, the introduction of digital technologies encourages companies to transform themselves, i.e., to achieve the possibility of driving the business using digital. On the other hand, the introduction of such technology requires a deep transformation by the company. In other words, in this new era successful companies are both digital and digitalized (Ross, Beath and Sebastian, 2017).

Since the 1990s, Enterprise Resource Planning (ERP) systems have driven the digitalization phenomenon and formed the central foundation of digitalized business processes (Ross, Beath, & Sebastian, 2017).

1-4 NEW PHENOMENON THAT IS ACCELERATING

As for the digitalization of companies, the digital HR transformation is not a new phenomenon. The 1970s saw the arrival of the first payroll software, and the 1980s were marked by the development of HRIS (Human Resource Management System). During the 2000s, the potential offered by the Internet enabled the development of numerous solutions and practices around e-recruitment, e-training, HR portals and social networks. Since 2010, the digitization of HR activities has been marked by an acceleration in the use and distribution of

FIG. 1: EVOLUTION OF THE HR FUNCTION



(Chammaa, 2016, p. 164)

1-5 THE HR PROFESSIONAL: AN ACTOR OF CHANGE

In change management, the understanding and reading of human issues is, by logical association, the responsibility of the HR function, the HR professional is the one most called upon to accompany the change, and considered the most decisive for its success (Peretti, 2013), in fact, the roles assigned to the HR professional, as an agent of change, have evolved according to the transformations, the context and the expectations of employees.

In his book "*HR from the outside in*," Ulrich shows that an HR professional must understand the world and be open to the external environment of the organization to anticipate change. His matrix remains a fundamental framework for the HR function, it will be enriched by the key competencies that an HR professional should develop at the strategic, organizational and individual levels (Ulrich, 2018)

As a result, to manage change effectively, a change agent must perform the following four roles (Ulrich, 2018):

➤ CHAMPION OF CHANGE :

The HRP (Human Resource Planning) must first initiate the change, which consists of creating the need for change and justifying to the recipients the importance and the opportunity that it presents. This action relies on its ability to bring together all the parties concerned and engage them in a common strategy, followed by the second step of co-construction of the change, The HRP must support the change and make it sustainable by putting in place the appropriate methods, with the aim of identifying individual and collective problems and transforming them into an action plan. It must also define, with the decision-makers

and managers, the necessary resources and the expected results, in order to evaluate the effectiveness and evolution of the planned transformation.

➤ STRATEGIC POSITIONER :

Change is the result of a desire to adapt to developments and trends in the environment, so the HR professional should translate these external trends into internal decisions and actions, he/she is required to understand the social, technological, economic, political or environmental context, likely to influence business models, in addition, he/she must be able to detect the needs and expectations of employees and customers and contribute to the implementation of consequent strategies, in this regard, the HR professional follows a forward-looking logic in order to anticipate changes and transform them into leverage and competitive advantages.

➤ CREDIBLE ACTIVIST :

The HR professional must inspire confidence, the role of "*credible activist*" is crucial for a change project, the latter must invest in relationships with the different hierarchical lines, at all levels of the organization, a skill that is nourished, among other things, by personal integrity, ethics and empathy towards employees. HR professionals are most effective when they are credible, reliable and proactive.

III. CHALLENGES AND STAKES OF THE DIGITAL TRANSFORMATION OF THE HR FUNCTION

In this context of accelerating digital transformation, technological, economic and social issues are very well taken into account.

2-1 TECHNICAL ISSUES

Digital technologies are helping to transform the organization and operating methods of companies through the automation of processes and the evolution of project and business practices. Aligning technologies and their uses with the company's strategic orientations, mastering internal and external data sources, identifying algorithms that make sense of the information collected and having the skills to work in a coordinated way within the organization seem to be key success factors in the new digital environment. The question of IT governance that enables the IT organization to support and develop the organization's strategy and objectives is more central than ever. "The challenge is that digital technologies participate in improving value creation processes, while taking into account risk management and technical performance" (Bounfour and All, 2015).

2-2 ECONOMIC ISSUES

Digital technologies continue to foster new modes of organization and new intermediations, profoundly transforming the economic models inherited from the industrial revolution, and the place of the consumer/user. At the same time, the way in which organizations will know how to collect and process massive data, while reassuring the various stakeholders about the processing carried out, could constitute an intangible capital of primary importance, still insufficiently valued by the markets.

Just like brand equity, which financiers now include in the valuation of firms, it seems to us that, in a knowledge-based economy, companies should be able to define and value their digital capital. A key question for us, therefore, is to verify whether we can speak of the digital capital of companies and, if so, evaluate it. While the media sector was affected very early on by the digital transformation of cultural goods, for which consumers themselves chose to become music and film publishers (Poels, 2015) by relying on electronic exchange platforms, other sectors are still on the verge of major transformations, such as the automobile or health sectors.

2-3 SOCIAL ISSUES

Today, human activities will be more and more dependent on digital devices. In this context, human issues must be reconsidered.

❖ THE APPROPRIATION OF DIGITAL BY ALL THE PLAYERS

One of the essential conditions for a return on investment in the use of digital technology in the workplace is the appropriation (Grimand, 2012) by employees, managers and leaders of organizations. The identification of the factors of appropriation of digital technology in a particular context is essential in order to work on deployment strategies for all the actors of an organization.

❖ THE EVOLUTION OF INDIVIDUAL AND COLLECTIVE SKILLS

A key question for the company of the future will be the skills of these employees, in the factory of the future,

"the role of man in the triangle man/machine/product is called to change profoundly; operators would indeed be equipped with tools of augmented reality and communicating to interact with other team members, monitor the production line and identify incidents. Man, and machine are deeply intertwined here. The integration of automatic sensors and the influx of massive data on workstations within the production chain are changing the relationship between men and machines and should allow for an enrichment of tasks and an increase in skills that companies must anticipate and support to remain competitive.

In the digital age, Human Resources management will have to face new challenges. These changes and challenges force us to adjust and reinvent ourselves in order to meet individual, collective and organizational needs.

The digital transformation of organizations leads not only to a change in the tools used, but also in behaviors and work habits according to (Tambe et al. 2012). Information technologies make companies more extroverted, i.e., capable of being more in touch with their environment in their innovation process, so it leads to the emergence of new ways of working with an improvement in the Quality of Life at Work, HRDs (Human Resource Development) must be competent on the digital tools available to them.

According to Baudoin, the digitalization of the human resources function within companies covers two main dimensions as mentioned in the above section (the transformation of the function itself and then, it must accomplish the mission of accompanying the global transformation of the company), as the "architect of social" it must fully assume this role.

More generally, the digital transformation of the HR function raises a number of major management issues. The authors list at least five major challenges of the digital transformation of the HR function, such as: Thanks to digitalization, the use of potentials offered by digital technology, the HR function must be able to develop certain services allowing to "identify" and "analyze" the internal performance factors of employees thanks to HR analytics, to adopt a recruitment strategy, and to set up a feasible virtual training plan.

This transformation allows the HR function to respond to the new operational challenges and expectations of current or potential future employees in order to attract, retain and make employees perform well, thanks to the digital potential offered by e.g. the future candidate self-learning informal and employees no longer need a training plan or traditional skills development (face-to-face) but remotely (telecommuting) ; by digitizing the HR department, harmonizing practices and content, by setting up a human resources information system (HRIS), making it possible to standardize all practices in different entities despite their divergent processes.

This digital transformation of the HR function, allows to optimize, automate and decentralize the circuits of validation of request, tasks to be accomplished by all the different actors of the system, the time of realization and the mode of validation.

Finally, thanks to the digitalization of the HR function, allows the control of human resources data i.e., manage flows for HR practices, compliance with legal texts and laws on data protection; RGPD (General Data Protection Regulation); and control of performance Baudoin et al. (2019).

CONCLUSION AND OUTLOOK

The literature on the transformation of the HR function has allowed us to observe that this transformation does not stop at the level of the HR function, its processes and practices, but extends to all the functions that make up the organization.

From a managerial and theoretical point of view, the digital transformation of organizations requires in-depth studies on this subject by practitioners and researchers to enable academics to understand the issues and challenges that organizations face.

To answer our question we can say that the digital transformation that the world is going through is more important than the industrial revolution, in order to complete our answer the digitalization of the HR function, and the organization in general, constitutes an added value as indicated by (Westerman et al. 2011): digitizing the customer experience such as digital marketing, operational improvements such as process automation, and the transformation of the business model of the organization such as networking.

This research has a number of limitations, on the one hand at the theoretical and empirical level, at the theoretical level, the digital transformation on the plan presents a deficit and less exploited by researchers in economics and management, and on the managerial level, the digital transformation presents a number of challenges and difficulties for practitioners in HRM (Human Resource Management), manager etc. is to replace traditional practices by the new ones.

These limitations open up several avenues of future research, firstly, to complete this research with a field study, in order to apprehend the facets of the digital transformation of the HR function itself and that of the organization in a global manner, then to study the impact of this transformation on the performance of the HR function and the organization.

To conclude, the arrival of digital technology has subjected organizations to competition on a national and international level. This competition does not stop just at the product and service level proposed on the markets, but on the markets of the human capitals in terms of skills, being innovative and responding to the need of the market in full evolution.

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