

A Brief Analysis of How Digitalization Impacts Human Resource Practices and Challenges to it

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ABSTRACT

Every business has changed its strategy in the era of technology and stiff competition. To have a competitive edge, it has become substantial for businesses to adopt digitalization as it saves time and creates new opportunities. However, this disruption does not occur at the organizational level; it has societal and environmental implications. At the business or organizational level, it has fundamentally transformed every functionality, and the HR function is one of them. It offers new tools and work methodologies to enhance employee efficiency, engagement, and decision-making. Digital technology has streamlined various HR processes such as recruitment, selection, training and development, performance management, etc. Tools like artificial intelligence and HR analytics have revolutionized workforce planning and management, offering real-time feedback and increasing efficiency. It has enabled HR professionals to make informed decisions based on extensive data insights. Besides offering benefits, digitalization also presents challenges that need to be considered. The firms must adopt digital tools and tactics to improve their HR operations and stay competitive. The present study explores the impact of digitalization on HR practices and offers insights into the challenges and opportunities it presents. This article attempts to determine how digitalization impacts HR practices and its significant challenges. This theoretical discussion gives a brief review of the impact and challenges of HR digitalization in the current scenario. For this study, the researcher reviewed the most recent research findings from the scientific literature and business practice and used an integrative research method. This research article is becoming an essential voice in HR digitalization and its impact on HR practice. It will allow HR professionals and academia to develop more insights into reaping the benefits of digitalization and concentrating on how it can be strategically advantageous for business organizations in this technological era.

Keywords: Digitalization, Impact of Digitalization, Human Resource Practices, Challenges and Trends

INTRODUCTION

Digitalization is a powerful engine for the growth of an economy worldwide. In digitalization, individuals, businesses, and organizations use digital tools to improve and enhance their efficiency and value by saving time and creating new business opportunities. To be competitive and keep pace with the latest developments in this digital world, it becomes crucial for businesses to undergo digital transformation. Different companies use digitalization in various ways according to their business needs in other functionalities (“Digitalization in Business: Benefits and Best Practices—Upwork”, 2023). Digitalization should not be confused with digitization, which involves converting information into a digital format, while digitalization involves transforming business processes using digital technologies. Digitization is a part of the digitalization process (“What Is Digitalization? And Why Is It Important?”, n.d.). Digitalization is the key driver that initiates transformation in organizations, institutions, and society through its innovation and provides businesses with opportunities to create value (Kraus et al., 2021; Wang et al., 2023). Digitalization has disrupted businesses and their environment, changing the current business model due to obsolescence (Parviainen et al., 2017). The opportunities driven by digitalization have pressured companies to act strategically and find more business opportunities as soon as possible

(Rachinger et al., 2019). It is one of the significant trends that will have more impact on society and business than the Industrial Revolution in the future (Parviainen et al., 2017).

Digitalization in HR: An Overview: Digital technology has revolutionized our work style, HR processes, and practices. HR digitalization enables HR to dematerialize practices using digital tools. HR digitalization can be seen through practices such as online pay slips, online leave and attendance management, online recruitment, online training and development, and so on. The digital transformation of HR is a long-term process involving three stages: assessment and planning, implementation and integration, and adoption and optimization. Assessment and Planning start with identifying areas to be improved by studying current work systems and technology. Once the areas have been identified, the organization can decide how to leverage digital tools to achieve its objectives. The roadmap for implementation starts with this. The implementation starts with deploying new digital tools and integrating these to make a cohesive digital platform by prioritizing data security according to industry regulations. Once the implementation is over, it is adopted and optimized by training and improving employees' skills to use new technology. Dave Ulrich states that four phases comprise the company's digital HR journey. HR Efficiency, HR Effectiveness, Information and Connection/Experience are phases. In the efficiency phase, organizations invest in technology to run HR processes. In the effectiveness phase, organizations use technology to upgrade people's skills in various HR practices such as people management, talent acquisition, and training. In the information phase, companies use technology to access data and leverage people analytics. In the connection phase, digital HR tools are used to build connections between people. The experiences built between them are leveraged through social media tools, and a sense of belongingness is developed ("HR Blog & Resource Library | AIHR | Videos | Guides | Case Studies", n.d.). HR digital transformation has two components: transactional and transformational. The first component includes payroll, leave management, time and performance management, while the second includes talent management.

Digital HR practices differ from traditional ones because they digitalize manual processes such as record keeping, data analysis, and employee feedback. Digital HR produces streamlined and easily accessible data without taking too much time and cost and gives real-time feedback instead of annual feedback as given in the traditional HR system.

Benefits of Digitalization in HR: Integrating technologies such as artificial intelligence, automation, and digitalization has reshaped the business by reducing costs and making processes data-driven and efficient. According to a study by Deloitte on HR tech disruptions, technological use (use of AI and predictive analysis) has grown in the organization in HR functionalities ("What are the benefits of digital HR? - HRD", n.d.).

The functional areas of HR management in which the benefits of digital technologies are:

HR Planning: HR planning is a strategic process that ensures the right quality and number of employees in the organization. Organizations go through workforce planning with the help of a centralized database of employee information, the so-called HRIS, and predictive analytics. They use predictive analytics and AI software to study the trend of anticipated HR planning. For example, BCG's Strategic Workforce Planning (SWP) tool leverages predictive analytics to forecast workforce requirements, identify skill gaps, and build strategies to develop the future workforce.

Recruitment: This process creates a pool of potential candidates and is a vital HR function. It involves a series of systematic steps, and sometimes, it becomes tedious for HR managers to perform many functions. Digital transformation in the recruitment process became prominent during the COVID-19 pandemic. It has become a mandate for recruiters to be proficient in digital tools and strategies ("What a Fully Digital Recruitment and Selection Process Looks Like.", n.d.). There are different digital tools for the recruitment process. These tools are the software or online programs built to assist HR teams in hiring. Essential HR tools for cooperating with HR teams are chatbots, application tracking systems, and AI tools that use predictive analytics. Chatbots (digital programs) have helped give prompt responses to candidates. ATS has helped streamline the applications and increase the efficiency of HR managers by reducing the time on unusual practices. AI technologies have improved HR managers' decision-making capacities and optimized the user and candidate's experience.

("5 Essential Digital Recruitment Tools | Occupop", n.d.) Different AI tools for the recruitment process are HireVue, Pyometrics, Textio, Jobvite, Hired, ZipRecruiter, SmartRecruiters, Oracle Taleo and many more. HR departments opt for HR digital tools on the needs and strategic objectives of the organizations ("AI tools and softwares - Digital Griot", n.d.).

Talent Management: Talent management is one of the strategic functions of HR management because it is essential to an organization's success. The digital transformation in talent management is an operational change that uses data management to make effective decisions (Martínez-Morán et al., 2024). Since the 1990s, the terminologies for information and technology-based HR have changed. With the progress in cloud-based information technology, the Human Resource Information System (HRIS) has been changed into Digitalized Talent Management (DTM) Wiblen & Marler (2021).

Employee Onboarding: Employee onboarding is a process in which new hires get acquainted with the company's work culture and are welcomed and valued as new team members. It differs from employee orientation, which is the first step of the onboarding process ("Right Employee Onboarding Explained | Workable," n.d.). Employee onboarding handles the legal paperwork and helps new employees adjust to the company ("The Onboarding Process: A Step-By-Step Guide – Forbes Advisor," n.d.). Employee Onboarding involves five Cs. These are compliance, clarification, culture, connections, and check-back. Manual onboarding was a daunting task for HR professionals. However, with the growth in technology, digital onboarding has come into existence, which does not require in-person orientation and manual learning and training. Digital onboarding has become necessary for organizations as it increases efficiency and reduces the costs associated with manual traditional onboarding methods. There are specific onboarding softwares such as Paycor, Workday, BambooHR, Rippling, UKGPro, etc., which provide organizations with the facilities of compliance support, early employee engagement, tax credit integration, e-signatures etc., depending upon their requirement and software they are using.

Challenges and Barriers: To bring successful digital transformation, the HR function is responsible and involves accepting all stakeholders in this transition. While bringing such a transition, all HR processes should be in harmony with organizational strategy and goals (Barišić et al., 2021; Kurek, 2021). Digitalization in HRM has certain advantages but also some challenges. The challenges of digitalization in HRM have been discussed below:

Data Privacy: Data security and privacy are significant concerns for organizations and employees in the context of HRM when digitalizing processes and practices in this digital era (Barišić et al., 2021). Data privacy protects collected and stored personal information, ranging from contact details to financial health. Safeguarding employee information from cyber threats becomes essential, and adhering to privacy law requires a strategic approach. To prevent data breaches and maintain data privacy, data must be encrypted with limited or no access to data. The HR department can use document comparison software to prevent data breaches by identifying discrepancies in the data. Moreover, they have started leveraging artificial intelligence (AI) and machine learning (ML) to detect potential threats. The tech giant IBM is the prime example of adequate data privacy in HR functions. It has robust data privacy protocols comprising safe data collecting, sophisticated data encryption, and AI-driven threat detection technologies (Hosking, 2024).

Integration of New Technology: Introducing new digital tools and processes can be complex and resource-sensitive. Moreover, employees are more reluctant to replace the existing system with a new one. Employees feel overloaded as automation makes work more unpredictable and complex for them. Although employees' work is reduced, their role becomes crucial in controlling the utility and usability of technology (Lagrange, V., 2001). Employees become technophobes as they fear losing their jobs and have financial insecurity caused by AI and innovative technologies (McClure, 2017). Implementing digital and innovative technologies requires time and money. HR managers must understand how this technology can be leveraged to increase operational efficiency and ensure that this implementation follows the organization's policies and ethical standards (Rajabalee & Santally, 2020).

Skill Gap: Digitalization requires HR professionals and employees to embrace new skills such as data analytics and digital communication. To adopt the swift transformation brought by the implementation of digital technologies requires the upgradation of knowledge skills and abilities of employees (Mazurchenko & Maršíková, 2019; Sankar et al., 2021). Patmore et al. (2017), in their survey of 268 UK HR Professionals regarding technological readiness, digital mindset, and digital abilities, found that only one in seven is an expert in digital technology usage. This emphasizes that the majority (61% poor to average) have digital skills gaps, and using digital analytics is the biggest of them (Mazurchenko & Maršíková, 2019). To change this attitude, investing in technological skill development is imperative. This enhances employees' confidence and retains the next generation of employees who are motivated to work with innovative technology. Technological investment decreases the sense of insecurity and improves employee's well-being and overall organizational effectiveness (Welfare et al., 2019).

Legal and Ethical Considerations:

Ethical issues of new workplace technology have been contemplated for over a century (e.g. Ure, 1835; Kim et al., 2020). According to a LinkedIn report, 90% of small businesses in India use AI and automation to stay resilient. Technology adoption has increased in all domains, including marketing, since the pandemic in India (Advisor, 2024).

Using AI and automation in human resource management calls for ethical and legal considerations, particularly bias in recruiting algorithms and equity in automated assessments. Responsible Research and Innovation (RRI) is a comprehensive framework that builds upon previous discussions about the ethical, legal, and social dimensions of innovation and technology assessment, intending to incorporate ethical considerations into the first phases of innovation processes (Lubberink et al., 2017). The AI technologies in HR are questionable as to whether they accurately anticipate future abilities and whether their hiring judgements are robust. These issues are similar to those in other AI applications, including privacy, accountability and discrimination. Many aspects of job seekers are at risk, especially their autonomy.

Considering the importance of employment in individual life, these ethical questions regarding the use of AI in HR need to be answered. To comply with ethical and legal considerations, HR departments should make clear to all employees how algorithms work and how certain decisions have been made. AI and automation systems must be continuously monitored and audited to ensure that algorithms are fair and unbiased and comply with ethical AI practices (Dennis & Aizenberg, 2022). Companies must comply with laws such as the Equity Act of the UK and the California Consumer Protection Act (CCPA) of the United States.

CONCLUSION

Regarding digitalizing and automating processes in organizations, HR is one of the core functions where innovative technology plays a crucial role. Digitalizing HR processes has transformed businesses—the benefits of digitalization range from day-to-day practices to strategic planning. Digitalization has increased efficiency and reduced costs for organizations. The automated system and self-service portals provide information to employees about their performance through real-time analytics, and they must comply with performance standards. Digitalization has reduced the burden of HR professionals on unusual tasks, and they have enough time to make strategic decisions.

The benefits of digital technologies in HR can be seen in HR planning, recruitment and selection through application tracking systems (ATS), training and learning through learning management systems (LMS), talent management, etc. Adopting digital technologies has data privacy and security challenges, ethical and legal issues and technological skill gaps. Despite these challenges, digital technologies and automation have transformed every business activity. HR professionals must understand what technological advancement is needed in organizations and what must be adopted to achieve organizational objectives.

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