# Influence of Digitization on Human Resources (HR) Services and Processes

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## Abstract

**The digitalization of human resources (HR) is the primary development organizations are experiencing, and it has gained exponential adoption over the years. HR must implement new methods and procedures to keep up with the rapidly increasing levels of workforce modernization. The creation of modern operational HR processes, which can improve communication, cooperation, and access to data analytics, is one benefit of a systematic approach. Implementing digital solutions for HR operations is extremely important for a company since these solutions offer numerous advantages, including reducing duplicated or repetitive tasks, reducing the risk of making errors, and creating space for HR to concentrate on essential tasks. There needs to be more understanding that adopting digitalization is challenging, yet the services and procedures related to human resources might be a low barrier to entry. The study investigates how companies move toward a comprehensive and uncomplicated digital solution, and it enables companies to get started with employee analytical data, access to cashless treatment, and seamless invoice consolidation via the portal.**

## Keywords

**Digitalization, Human Resources, Digital HR, Applicant Tracking Systems (ATS)**

## INTRODUCTION

Even if most organizations are starting to think about digital HR and work on a plan, leading corporations are already embracing this new approach to doing HR operations, processes, and services. Industry analysts believe that digital HR is an essential component of the digital transformation of businesses in general, and they also think that digital HR is an integral component of the digital transformation of companies in general.

The digitization of a business's human resources (HR) services is of the utmost importance to that organization. It is a crucial and strategic role that attempts to maximize the workforce's potential to achieve the organization's objectives. The activities and processes of human resources (HR) have been altering in response

to developments in technology, shifting patterns of consumer behavior, and an intensifying globalization of markets. One of these phenomena, known as digitization, has recently transformed HR practices by bringing about more efficiency and production at lower prices. What exactly does "HR Digitization" mean? The process of turning information into a digital representation is referred to as digitalization (Amin & Mandapuram, 2021). Digitization provides several benefits, including better accessibility and retrieval ease, decreased overall costs, accelerated communication speeds, and enhanced safety. All of the processes relating to human resources make use of it so that they can function more effectively and more efficiently (Desamsetti, 2016).

The phases of human resource management that are most heavily weighted in importance are selection and recruitment. It is frequently the initial step in hiring new employees and is an essential component of onboarding new workers. The process of recruiting and selection can be digitized by integrating tools that allow for more effective sourcing, screening, and candidate tracking. Examples of such systems include applicant tracking systems (ATS) and databases that store CVs and resumes. The usage of digitalization is also prevalent in the realm of education and professional growth. Either through the utilization of eLearning platforms or the development of a Learning Management System (LMS), this can be accomplished. The learning management system (LMS) can be configured so that users can access various content (such as textual materials, videos, and interactive games), which they can access at any time and from any location. "Digital HR" refers to digitally transforming HR-related services and procedures by utilizing social, mobile, analytics, and cloud computing (SMAC) technology (Bodepudi et al., 2019). Although it occurs along a continuum as businesses grow, digital HR represents a fundamental shift in the approach and execution of HR functions. Improving employee engagement and retention and enhancing an organization's success measurably by continuously evolving in an agile manner are the goals of this initiative.

## DIGITALIZATION'S IMPACT ON HR SERVICES AND PROCESSES

The panorama of digital disruption includes digital human resources as a component. This pressure has been exerted due to the success of early adopters, including cloud-first startups.

• Savings in Expenditures: The digitization of human resources functions has enabled businesses to realize considerable cost savings. Utilizing intelligent systems and applications can potentially cut overall expenses associated with human resources by more than 10%. In addition to this, it assists businesses in achieving improved operational efficiency, which is something that would not be feasible without the use of digitalization (Bodepudi et al., 2021; Mandapuram et al., 2018).

• Increased Productivity thanks to: Compared to more traditional hiring procedures, such as relying on interviews or resumes to fill open positions, organizations that have implemented digitalization in their HR departments find it much simpler to recruit people who possess the particular skills they require. Thanks to digitized recruitment processes, organizations can hire individuals who are a good fit with their culture and are best suited for the post they are looking for. This allows organizations to increase productivity while simultaneously reducing employee turnover rates.

• Higher Levels of Productivity: The processes of human resources lead to higher levels of staff productivity and improved levels of customer satisfaction. Customers are more interested in buying from companies that offer them improved services at rates comparable to those offered by competitors, as opposed to buying products of a higher quality that may be priced higher (Gutlapalli, 2017b).

• Improvements to Our Service to the Customer: Companies that have adopted digital HR solutions have improved their customer experience by providing faster responses to issues raised at any time during the day via chatbots or automated phone calls. This is in contrast to waiting until later in the day to get answers from someone who may not even know what happened due to a lack of transparency & visibility into the information flow within company systems within different departments such as sales and marketing (Desamsetti & Mandapuram, 2017).

• An Increased Level of Safety: Hackers will have a more challenging time gaining access to sensitive information if businesses digitize and automate their business processes. This will allow enterprises to strengthen the security of their data and prevent hacking. This is of utmost significance

in fields such as healthcare, where the slightest invasion of patient confidentiality could result in death if patients are not given the appropriate care at the proper time (Gutlapalli, 2016a).

• Enhancements to the Data Analysis: Companies can readily access and evaluate data with the assistance of digital tools for human resources, which enables them to make better decisions that improve their overall performance. When managers look at employee engagement levels or absenteeism rates, for instance, it is easy to get a clear picture of how well the firm is doing.

## HOW THE DIGITAL HR SYSTEM OPERATES

The term "digital HR," which can also be referred to as "the digitization of HR," is an approach to human resources (HR) services and operations that is cloud-first, mobile-first, data-driven, collaborative, and iterative. This approach aims to deliver on business strategy and employee experience. It uses cloud-based human capital management (HCM) and talent management systems, which allow for more straightforward deployment, automatic upgrades, fewer technical issues, and, according to many reports, improved automation, proven improvements to HR, cost savings, and an expanded ability to integrate new technology. Digital Human Resources employs data and analytics to monitor progress at every stage of the staff life cycle, from recruitment to learning & development to retention and offboarding, to pivot when a given approach is unsuccessful immediately. This includes recruitment, learning and development, retention, and offboarding. It supports a focus on agile change through tools such as pulse surveys and eNPS, examples of lightweight technology it utilizes. Social media is leveraged in several ways by digital HR, including social media recruiting and incorporating social media into learning initiatives when it is suitable. In addition, it embraces the consumerization of human resources and reimagines HR self-service as a truly user-friendly experience for staff members (Gutlapalli, 2016b).

Changing HR's technical infrastructure is only one aspect of digital human resources. It represents a proactive approach to aligning HR functions and goals with the business's purposes and partnering with other stakeholders to identify how to achieve this alignment most effectively (Mandapuram, 2017b).

## DIGITALIZING HRM PROCESSES BENEFITS

The following are some of how firms might benefit from the digitalization of their HR processes:

• Quality improvement: Using technology to simplify operations relating to human resources can also improve the quality of the data collected due to those activities. This indicates that when you hire new employees or perform annual evaluations, the information you order will be more accurate; consequently, this will result in better decisions and happier employees.

• Decreased expenses: The more time you devote to performing administrative responsibilities, the less time you have to commit to other pursuits. This can result in increased stress levels and a general decrease in productivity. You can save money by avoiding the need for unneeded meetings and phone calls from employees or managers asking inquiries about their files if you use technology to streamline the processes that are involved in human resource management.

• Increased productivity: When a well-designed HR system is in place, employees can more readily examine their files and communicate with their managers. This leads to increased productivity. When filling out documents or requesting time off, they do not need to be concerned about the possibility of losing paperwork or forgetting vital information (Gutlapalli, 2017a).

• Flexibility, cost-effectiveness, and efficiency: Digitization enables HR directors to adjust their business operations swiftly to changing market conditions. This is one of the primary benefits of digitization. Because of this, organizations that have digitized their processes are in a better position to react swiftly whenever new technologies or trends emerge.

• A reduction in the amount of paperwork required: As a result of digitization, the amount of paperwork that must be completed by employees and managers during the various stages of the HR process, such as recruitment, training and development, and payroll administration, is reduced.

In addition, it decreases errors in human data entry, which are potentially expensive for employers if they are not discovered and corrected promptly (Reddy et al., 2020; Gutlapalli, 2017c).

- Improved data accuracy: Using digital technologies, you can acquire correct information more quickly than ever before, enabling you to make better judgments based on facts instead of assumptions or guesses (Mandapuram, 2016; Mandapuram et al., 2020).

- Improved communication: If you use technology to streamline HR operations, you may free up more time for employees and managers to devote to other critical responsibilities. It is much simpler for new employees who have just started work and require training in their first week on the job to access online training modules instead of having a lengthy face-to-face meeting with HR about why they need training (Gutlapalli et al., 2019; Mandapuram & Hosen, 2018).

## DIGITALIZING HRM PROCESSES DRAWBACKS

- Automation is a tremendously valuable tool, but it can also be a double-edged sword: When utilized effectively, it may help organizations save money and enhance their profits. If misused, however, automation can be a double-edged sword. Automation can have several unfavorable effects when not appropriately implemented, including eliminating jobs. To steer clear of these adverse outcomes, businesses need to consider how they implement automation thoughtfully. They should also ensure that their workers have sufficient training with technology so that they can easily transition into different responsibilities within the organization whenever those roles become necessary.

- Loss of subjectivity: Because human resource management systems typically give managers in-depth information about employees' credentials, certifications, and degrees, managers may be inclined to promote employees based on the information provided by the system rather than on their judgments. This can result in a reduction in employee satisfaction. Supervisors can be discouraged from getting to know employees personally when evaluating an employee's prospective contribution to the firm. Despite their quantifiable powers, computers can only provide a limited image of what is occurring.

- A lack of faith in digital data: Many people still need to believe that the information saved in digital media can be trusted to be accurate. They are concerned that the data may not be trustworthy and dependable, particularly when it comes to sensitive personal information such as names, addresses, ages, marital status, and other such details (Mandapuram, 2017a).

- A lack of understanding of the advantages of digitization: Most companies need a distinct concept of how they might profit from digitalization or automation in HR procedures. They are under the impression that they will have to pay additional expenses to use these new technologies. Still, the reality is that participating in digitization is more cost-effective than utilizing conventional methods, such as processing information by hand or contracting out services to third-party vendors at a high cost.

- A lack of understanding of how to successfully use technology: Organizations cannot take full advantage of the available technology because their staff need the appropriate skills or training required for their job objectives. Because of this, they end up favoring automation over human resources, which leads to eliminating jobs rather than recruiting new workers to fill a variety of positions within an organization's structure.

## CONCLUSION

The HRM operations and services have been significantly altered due to the introduction of digitization. With the use of technology, the workflows, processes, and other tasks of the Human Resources department are gradually becoming digital. It is anticipated that the digitization process will become more widespread in the future as well because it assists businesses in better managing their operations and increasing their production levels. The Certificate Program in People Analytics and Digital HR is an excellent option to consider if you are interested in pursuing a Human Resources (HR) career that will be relevant in the future. Various certificate programs geared toward the future generation of human

resources professionals are meant to impart the most up-to-date information. Faculty members of the highest caliber teach them.

## REFERENCES

Amin, R., & Mandapuram, M. (2021). CMS - Intelligent Machine Translation with Adaptation and AI. *ABC Journal of Advanced Research*, *10*(2), 199-206. https://doi.org/10.18034/abcjar.v10i2.693

Bodepudi, A., Reddy, M., Gutlapalli, S. S., & Mandapuram, M. (2019). Voice Recognition Systems in the Cloud Networks: Has It Reached Its Full Potential?. *Asian Journal of Applied Science and Engineering*, *8*(1), 51–60. https://doi.org/10.18034/ajase.v8i1.12

Bodepudi, A., Reddy, M., Gutlapalli, S. S., & Mandapuram, M. (2021). Algorithm Policy for the Authentication of Indirect Fingerprints Used in Cloud Computing. *American Journal of Trade and Policy*, *8*(3), 231–238. https://doi.org/10.18034/ajtp.v8i3.651

Desamsetti, H. (2016). Issues with the Cloud Computing Technology. *International Research Journal of Engineering and Technology (IRJET), 3*(5), 321-323.

Desamsetti, H., & Mandapuram, M. (2017). A Review of Meta-Model Designed for the Model-Based Testing Technique. *Engineering International*, *5*(2), 107–110. https://doi.org/10.18034/ei.v5i2.661

Gutlapalli, S. S. (2016a). An Examination of Nanotechnology's Role as an Integral Part of Electronics. *ABC Research Alert*, *4*(3), 21–27. https://doi.org/10.18034/ra.v4i3.651

Gutlapalli, S. S. (2016b). Commercial Applications of Blockchain and Distributed Ledger Technology. *Engineering International*, *4*(2), 89–94. https://doi.org/10.18034/ei.v4i2.653

Gutlapalli, S. S. (2017a). Analysis of Multimodal Data Using Deep Learning and Machine Learning. *Asian Journal of Humanity, Art and Literature*, *4*(2), 171–176. https://doi.org/10.18034/ajhal.v4i2.658

Gutlapalli, S. S. (2017b). The Role of Deep Learning in the Fourth Industrial Revolution: A Digital Transformation Approach. *Asian Accounting and Auditing Advancement, 8*(1), 52–56. Retrieved from https://4ajournal.com/article/view/77

Gutlapalli, S. S. (2017c). An Early Cautionary Scan of the Security Risks of the Internet of Things. *Asian Journal of Applied Science and Engineering*, *6*, 163–168. Retrieved from https://ajase.net/article/view/14

Gutlapalli, S. S., Mandapuram, M., Reddy, M., & Bodepudi, A. (2019). Evaluation of Hospital Information Systems (HIS) in terms of their Suitability for Tasks. *Malaysian Journal of Medical and Biological Research*, *6*(2), 143–150. https://doi.org/10.18034/mjmbr.v6i2.661

Mandapuram, M. (2016). Applications of Blockchain and Distributed Ledger Technology (DLT) in Commercial Settings. *Asian Accounting and Auditing Advancement, 7*(1), 50–57. Retrieved from https://4ajournal.com/article/view/76

Mandapuram, M. (2017a). Application of Artificial Intelligence in Contemporary Business: An Analysis for Content Management System Optimization. *Asian Business Review*, *7*(3), 117–122. https://doi.org/10.18034/abr.v7i3.650

Mandapuram, M. (2017b). Security Risk Analysis of the Internet of Things: An Early Cautionary Scan. *ABC Research Alert*, *5*(3), 49–55. https://doi.org/10.18034/ra.v5i3.650

Mandapuram, M., & Hosen, M. F. (2018). The Object-Oriented Database Management System versus the Relational Database Management System: A Comparison. *Global Disclosure of Economics and Business*, *7*(2), 89–96. https://doi.org/10.18034/gdeb.v7i2.657

Mandapuram, M., Gutlapalli, S. S., Bodepudi, A., & Reddy, M. (2018). Investigating the Prospects of Generative Artificial Intelligence. *Asian Journal of Humanity, Art and Literature*, *5*(2), 167–174. https://doi.org/10.18034/ajhal.v5i2.659

Mandapuram, M., Gutlapalli, S. S., Reddy, M., Bodepudi, A. (2020). Application of Artificial Intelligence (AI) Technologies to Accelerate Market Segmentation. *Global Disclosure of Economics and Business 9*(2), 141–150. https://doi.org/10.18034/gdeb.v9i2.662

Reddy, M., Bodepudi, A., Mandapuram, M., & Gutlapalli, S. S. (2020). Face Detection and Recognition Techniques through the Cloud Network: An Exploratory Study. *ABC Journal of Advanced Research*, *9*(2), 103–114. https://doi.org/10.18034/abcjar.v9i2.660

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