

## Future of Electronic Human Resource Management in the It Sector

<sup>1</sup>S. Sakthi Kamal Nathan, <sup>2</sup>Dr. R. Karthi

1 Assistant Professor, Department of Management Studies, E.G.S. Pillay Engineering College, Nagapattinam.  
[srisamsakthi@outlook.com](mailto:srisamsakthi@outlook.com)

2 Professor, Department of Management Studies, E.G.S. Pillay Engineering College, Nagapattinam. [karthi@egspec.org](mailto:karthi@egspec.org)

### Abstract

The core focus of the study is on the effectiveness of E-HRM within IT sector and its impact on the organization. It can be stated after conducting the study that the benefit of the presence of E-HRM has advanced the organizations. The involvement of E-HRM has ameliorated the activities of the employees working in IT Sector as well. The employees are encouraged to do their tasks efficiently and are motivated enough to provide effort in their tasks. However, numerous challenges exist in IT sector of E-HRM and from this study; the biggest challenge which is encountered is the implementation of **HRIS** is presented. In spite of these few challenges, the facilities that E-HRM provides to companies are highly beneficial. Among them, better self-service of employees is a vital advantage.

**Keywords:** Human Resource Information System (HRIS), software as a service (SaaS), information technology, web-based portals, database management, recruitment system.

### Introduction

The management of human resources has been transformed to a great extent as digital adaptation is rising rapidly. The new models of Human Resource management often require adapting the strategies of a business to the digital dynamic economy. The company's success includes significant capitalization of the market through the PISA model that involves effective performance in 4 major areas such as productivity, innovation, speed, and adaptation. Human resource management should measure the labor productivity that has been increased. This encourages innovation since the economic value gets increased almost five times. Employees who perform better than other employees often get rewards that motivate them employees to perform better in an organization. In an organization that is unstable, rapid scalability and constant adaptation often possess significant values toward an employee. The transformation of Human Resource management into the digital world integrates the business process of the organization. This happens due to the requirement that the business consists of equal rights in the HR departments (Abdeldayem and Aldulaimi, 2020). A desire to achieve balance among the employees and their personal life has become the cornerstone of the generation's worldview. The fundamental changes in the labor-management field have been associated with the transformation of the structures of an organization. The team of HRM has been strengthened by economists and professionals in IT that have developed professional competencies in the HRM field.

The implementation and development of mobile applications that could be used for corporate purposes such as recruiting have been incorporated. The experts have identified three primary areas of influence in digital technologies such as the introduction of a digital workforce, the design of the working environment, and the digital management of HR. The introduction of new methods for management often shares a practical skill set for contributing to the network organization. The usage of applications and digital tools for solution delivery and the introduction of innovation have been depicted. These technologies have been used in different processes of HR, such as working with big datasets, using artificial Intelligence, and collecting feedback from different areas. A newer category of tools has emerged that often ensures the approach of developing leaders and recommends the optimal training for identifying fraud attempts. Presently there is multiple software that consists of artificial Intelligence and is able to solve several problems. These problems could be candidate selection in order to analyze the emotional states of an employee. This software often analyzes the activity in a computer of a specific employee in order to understand their emotional state based on their messages in the chat rooms. Digital technologies have built up several companies that are more transparent and allow online resources to specify certain reviews. This includes several questions and information about different companies that spread their information quickly in the online forum and also collect feedback from the employees.

Statement no.	HRMS statements	Agree (%)	Disagree (%)
HRMS1	Governments will generally refrain from investing in new HRMS	5	95
HRMS2	Governments increasingly will cherry-pick stand-alone modules over choosing single-vendor HRMS	64	36
HRMS3	Governments will commonly use HRMSs to aggregate deep knowledge of employee expertise	59	41
HRMS4	HRMSs will increasingly be used in governments to seek candidates for hard-to-fill positions well before planned job openings	59	41

**Table 1: Statement related to Human Resource Management**  
(Source: Abdeldayem and Aldulaimi, 2020)

The following table states the different terminologies that have been discussed during this study. These terminologies have been used to identify and understand the different process that is happening inside an HRM. The feedback helps the companies in deciding the HR administration effectively. These factors have often been used in maintaining the personal and work-life balance of employees.

**Electronic human resource management** refers to the procedure of an organization for integrating the Department of human resources with IT. Information technology is integrated within the firm especially designed to assist with works related to human resources (Yong et al. 2019). There is an installation of software that can tackle several jobs that consume time. This permits HR employees to save time on tasks, as well as concentrate on maneuvers that are strategic and are designed to ameliorate the business. E-HRM handles the management of benefits of employees, and the software of E-HRM has been helpful in the view of staffing.

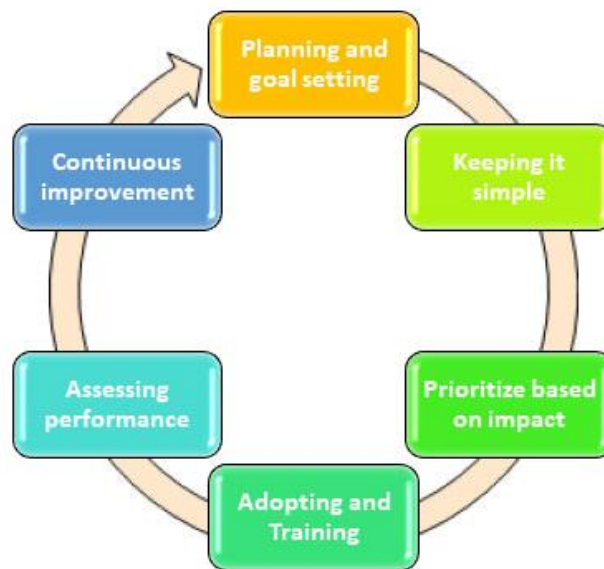
The economic activity digitalization has been associated with the emergence of labor risks and their contradictions that should be mentioned (Fenech et al. 2019). This increases the flexibility and differentiation in the market segments of the labor. This helps to develop new employment forms and build strong labor relationships, and improves the methods of labor pricing. There are several newer employment opportunities that have been developed and come into effect since the early 2000s. These forms of employment often contribute to the innovation of the labor market, thereby making it more attractive for both the employees and employers.

## Literature review

### Digitalization of Human Resources

Digitalization within Human Resources is the transformation of conventional processes of HR Department. The utilization of cloud computing is done by HR for the automation of the processes of HR and workflows. Cloud computing has revolutionized HR, and the processes of HR are streamlined by it. This permits the HRM department to focus on the activities of people. The concept of digitalization of human resources refers to the process of digitalization that takes the cloud storing of the data that is driven and collaborative. It uses the approach to human resources services with the process of delivering the business strategy and the experience of employees. The digitalization of human resources management and the talent for the management features easier deployment and the upgrade to the automatic mode with some techniques and challenges. It also accounts for the efficient automation process that is used in the demonstration of Human resources, saving costs and raising ability, to sum up modern technologies. Digital human resources use data analytics that is utilized in the measurement of progress at every stage in the life of an employee that is from the process of recruitment to the process of learning and the process that is involved in the development of retention and offboarding to pinpoint the strategy that is given for the utilization of technology (Strohmeier, 2020). It uses the capitalization process on social media in the learning strategies to embrace the consumerization of Human resources and self-services as a truly friendly experience for employees. The transformation of the activities of human resources is the most important goal for the successful digitalization of human resources. It is used in the proactive approach that reflects the function alignment and the goals of human resources with the goals of the business.

As the basis of development in the terminology and the strategy in digital Human resources management (HRM) is discussed on the theory and the concept of digitalization of organizations that appropriately conceptualizes the digitization of HRM. The specifications in the concept of digitalization signify the distributed introduction and the intermix concept. Several activities have been performed by E-HRM that helps in the progress of the performance of the enterprises. The first activity is to plan and set goal for Improvement of the productivity of the firm. Simple target and planning have been kept by them by doing this; employees are able to perform tasks without any hustle (Baykal, 2022). They give priority to the tasks on the basis of their impacts on the organization. Different strategies have been adopted by e-HRM for increasing the effectiveness of the company and training is prioritized for enhancing the performance of workers. Performance of each employee is assessed for the betterment of both the employees and the organizations. Steps are taken for continuous Improvement of employees that aids them in producing efficaciously. The general research concept revolves around the understanding that in the evolvement of digital initiation of Human resources management and the transformation of digital aspects in the sectors of Technology (Fenech et al. 2019). It also uses the outcomes of activities in information technology for Human resources. It describes the particular state of the organization and the result-related concept in the digital organization. The apparent relationship between the process and result-related concepts shows the concepts of electronic digitalization for the revolution of information technology in the digital world for enhancing the lifestyle of people. Digitization indicates the technical process of the conversion of analogous information at the organizational level into digital organizational information for the process of automation. Organization of digital aspects denotes the process of social and technical in exploiting the potential of digitization for the operational and strategic purpose of the organization (Fernandez and Gallardo-Gallardo, 2021). The digital transformation in the organization denotes the social and technical digitization for sub-processes of exploiting the potential of outcomes of socio-technical for the transformation of digital well-being. Social and technical designs are necessary for the appropriate and useful realization of digital human resource management. The designs of Human resources in the process of digitization provide the technical artifacts and the factors that help in the realization of HRM.



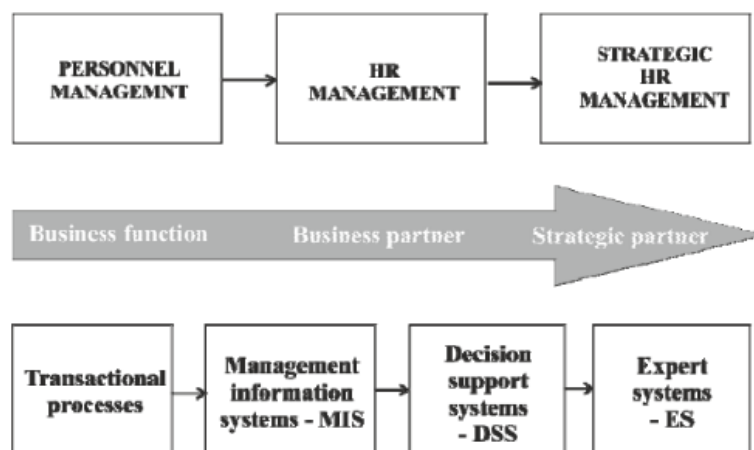
**Figure 1: Digitalization of HR**  
(Source: Baykal, 2022)

### **Role of Information Technology in Human Resources**

The usage of information technology is needed in the aspects that affect the quality of life, such as digital transformation, social media interaction, and communication through long distances. Information technology brings various improvements and rectifications to the organization, such as the increase in the revenue of the company and the reduction of administrative expenses. The increase in the production of products and services with the Improvement of the decision-making process and the services that are provided to the customer for the need for Improvement in the sectors of information technology holds importance for HRM (Muhammedrisaevnaet al. 2020). The organization uses the necessary steps for Information technologies that are for human resources management and the process of recruitment in raising the level of digitization. The people get the benefits of services for the employee in the interview process, management of

employees, and data storing in the process of uses of information technology that analyze the data in the appropriate manner. Several applications such as the wages and salary digitization process, training and allowance services, ticket booking, and a lot more can be achieved. It is in the form of software and hardware that enhances the purpose for the growth of the organization with the needs of customers and clients. The current scenario signifies the usage of the internet in the organization that is used to obtain the application for employees, and the new employees are placed for the use of information technology. The new worker replacement in the sectors of information technology is for the performance and the resulting outcome for the organization. The role of manpower planning is required in the development of technologies in the sectors of information and communication.

Manpower planning has been considered as the procedure of determining the number of individuals that can be required for a specific job. The planning that is related to manpower is to provide the plan in the workforce that is according to the requirement of Information technology. The information technology that is used in the organization for human resource management makes the function easier and more effective with the modern techniques that are used in the enhancement of information technology (Tarba et al. 2022). It also has an important role in the area of job analysis which is an important function in the job description and the specification that is in information technology. It makes the process of information technology in the organization effective and makes faster communication with the components of information. The process of recruitment and selection also has a great role of information technology in the hiring of human resources and selecting the human resources in the workforce to provide the required competence. It also uses internet services and online communication, which is helpful in the area of information technology. The practice of online communication uses the process for the smooth running of the communication process with its key elements to make it effective. The effective practice of recruitment and selection process of human resources makes the special aid to the human resource manager through information technology. The practice of appraisal is used in the analysis of the performance of the employees in the information technology sector that is required in the analysis of several methods for identification of the role of information technology. Training and development are mostly required in the process of development of IT which plays significant roles in providing training to the employees that are based on the records and documents. The importance of information technology is to prepare the technology for training and development. The work of HR has been connected by IT with the system of business for accomplishing the objectives productively and competently. In the sectors of industry, the role of information technology is useful for the wages and salary that are demonstrated through the administration for employees. Payment structure management is not an easy task, and it has the great role of information technology through job evaluation. The wages and salary get through the employees are provided most efficiently through the appropriate practice and usage of information technology. The compensation gets through the employees using the vital role of information technology to motivate the employees and raise their moral values to the accomplishment of the desired goals (Roztockiet al. 2019). The factor of compensation is important for identifying the performance of employees after the motivation, and information technology uses the role of catalyst in the compensation and recognition of employees in the organization. Information technology also uses for justifying actual advantages on the basis of performance in the organization. The role of IT in the sector of information technology helps to enhance digitization in the country to raise the lifestyle of people.



**Figure 2: Role of IT in Human Resources Management**  
(Source: Muhammedrisaevna et al. 2020)

### Challenges of Electronic Human Resource Management in IT Sector

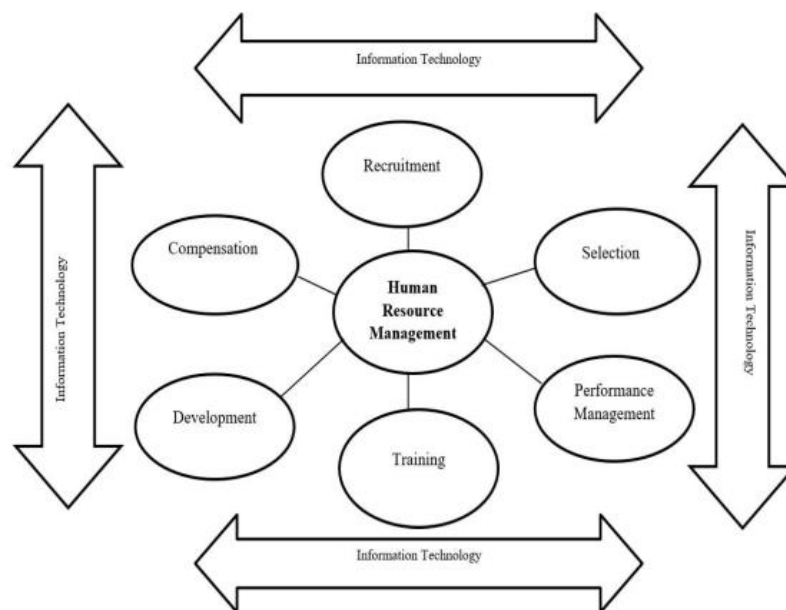
Human resources management (HRM) includes the activities such as the process of training, developing, and rewarding the people in the organization. Information technology also plays a vital role in the development of the organization to achieve the main objective in the field of human resources. It also precedes that technology of information and communication, such as the internet benefits in Human Resources management, linkage with the mobile network, media with fresh techniques, and contribution to human resource management also faces some challenges such as cost, and acceptance, security concerns, and increasing isolation, workload, and skills gaps that use in the sectors of information technology. The challenges associated with human resources management in information technology exhibit cost linked with the human resources technology with the based system of HR. The initial investment is required in the vast form of electronic human resource management. The implementation of the operational cost with the large specification of the organization causes challenges for HRM. Large organizations may install the packages HR, and it causes problems for low-level or high-level organizations (Vrontiset al. 2022). It also pinpoints the management of human resources in terms of costs in small organizations and the challenges for affordability. The implementation is done earlier in the technological innovations for the organization. It signifies the biggest obstacle in the form of human resources (HR). Performance in human resources technology has the issues such as skills or knowledge for users and opportunities for employment that always gives positive rise in the way of human resources management. Acceptance that is from the workforce is needed in the utilization of information technology to the fullest form. In the age of information technology, the practice of information technology is distributed and has become an important aspect of the job sector, ingrained through workers in the field of knowledge. It raises the responsibility of the employees by acquiring enough time. It requires the maintaining of a fully-fledged system in the overall system of e-HRM that helps in leading the costing of Human Resource management. The basic disadvantages of using specialized E-HRM are that it is freely accessible to all people and the strategies that are used in information technology. It is prone to severe problems such as corruption, hacking, and data loss, which are the biggest challenges in coping with the newly implemented technologies. Open access to the databases destroys the information that is for the private use of the employees and goes for unlawful authorization. With the easily accessible and transparent system, the employees are informed in a reasonable manner about the structure of the market, which increases the accessibility of inner and outer information on compensation. The awareness related to information technology about human resources management forces the organization to modify the structure of modification and compromise with the passage of time. It is structured to relate to the current form of the different companies. It causes problems that originate challenges for more informed employees in the organization. It requires the formation of a virtual network through the medium of the internet or web-based portals. The traditional system interacts with the Department of Administration regarding the issues of employment and the implementation of information technology (Tambe et al. 2019). It needs not to go to the branch of administration regarding employment issues. The isolation from the human resources implementation creates challenges that are connected in the virtual form. Talent retention and recruitment of talent in the organization, with the lack of career development and effective leadership, hinders the development of information technology for human resources management.



**Figure 3: Challenges of Electronic Human Resource Management in IT**  
(Source: Vrontiset al. 2022)

### Impact of Electronic Human Resource Management in IT Sector

The development of technology is an important activity for the innovation process. The application of information technology has a great impact on the organization that exists in a dynamic environment. It leads to high efficiency and the method of the effectiveness of human resources. The utilization of information technology for database management and the recruitment system for advancement is required to increase the efficiency of business for the management of human resources. The impact of information and communication technology implies human resources management, such as providing better services to the line managers, enhancing the management, recruiting of employees with effectiveness, management of data and the practice of critical analysis, and a lot more. The manager's and HR's main interest is the success of the business for the human resources to support the workforce needs of the organization (Chege et al. 2020). Strategic planning between human resources and managers is important for undergoing the review of future business demands. It is to check the training process of present employees and to prepare them for the need for promotion to recruit candidates with higher levels of skills. It also impacts the management practice by enhancing the tools of human resources. It is used to enhance efficiency and effectiveness that, lead to the success of the organization. It involves Organizations across the world that are used in the driving practice to improve organizational performance regarding the size of the organization (Simaet al. 2020). The analysis of the organization's performance in the context of human resources brings a positive impact on the sector of information technology. HRM also has a positive impact on the practice of effective recruiting, and IT has a vital role in making the process effective. The process has been effective with the use of the internet and increases the assumptions and predictability of hiring efficient employees. The presence of employers presents the necessary information that is related to the career, job perspective, and personal development that uses in the process of analyzing the potential for the effectiveness of recruitment. It also has effects on the critical analysis and data management that uses in IT and becomes easier with time. The performance of the organization leads to the timely success of the business in a stable and unstable environment. Employee performance data can also be analyzed through the HR IT tools that become readily accessible form for everyone. The impact of inventory management tools and human resource management led to the success of IT in providing a universal set of products with the diversification of products and services. It also impacts the cost reduction that uses the IT tools to increase efficiency and maximize the profit of an organization. The positive impact of IT also on customer Service and the development of careers in human capital management signify that employees are rewarded for their performance based on the HR IT tools database.



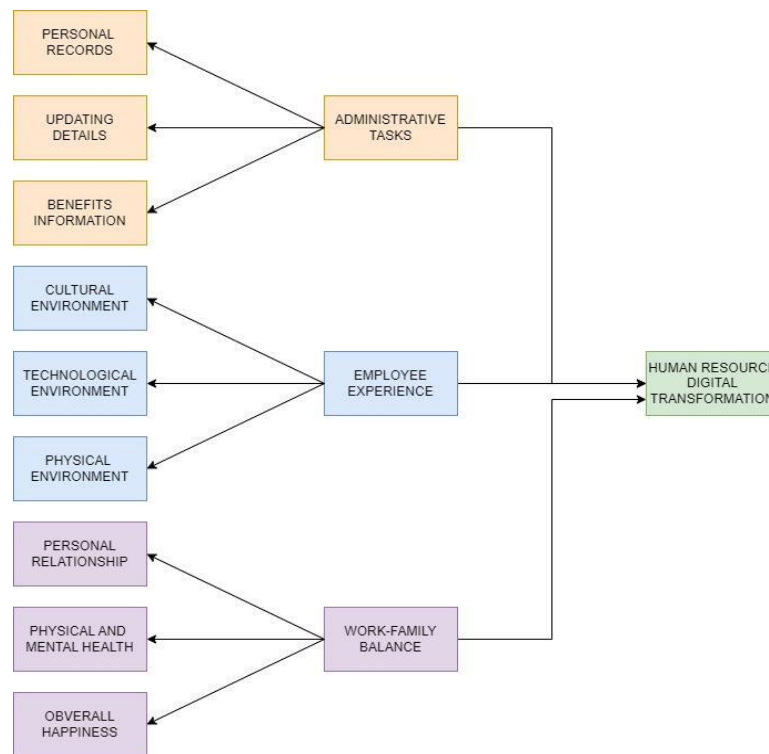
**Figure 4: Impact of Electronic Human Resources Management in IT**

(Source: Simaet al. 2020)

### Methods

In order to study and understand the impact of HRM digitalization, an analysis that is narrative has been conducted among different organizations that have introduced different digital technologies. This narrative analysis that has been done as a

narrative method consists of several advantages, such as quantitative methods. This helps to evaluate the perception that is subjective into the HRM digitalization thereby highlighting the negative and positive effects of the HR technologies. Difficulty in using the narrative method analysis is because of the time that has been spent on the implementation. In this study, secondary data analysis methods have been performed in order to collect data for this study. Secondary data collection methods are the process of collecting data from different research journals and research articles. These research journals have been based on the topic of HR digitization at the present time (Strohmeier, 2020). The work of scholars on HRM that is technology-enabled has investigated topics that are diverse in different contexts. This has explored the issues that have been reviewed in several articles. The primary aim of this section is to identify the main findings in the areas of Human Resource management. There are primarily three main research articles that have been identified that are AI, advanced technologies, and robotics. These articles have been grouped into three different research themes, and 100 research articles that have been collected. Forty-five articles have been chosen in order to collect the necessary data for Human Resource management in the context of digitization.



**Figure 5: Advantages of Digital Transformation of HR**  
(Source: Strohmeier, 2020)

Figure 1 depicts the research model of human resource management that states the different research areas included in the HRM, such as administrative tasks, work-family balance, and employee experience. The other four journals have not specified HR digitalization and therefore have been excluded from the scope of this study. The majority of the articles have belonged to the second theme and their influence on job replacement. The collaboration of human AI and their decision-making have been introduced in the second theme. The third theme primarily includes seven different articles that aim to understand the robotic impact on employees and the collaboration between robots and humans. The technologies of information allow for the significant transformation of the organization and its functions and routines. The interaction between HRM and human technologies is primarily known as eHRM. This has gained significant attention for understanding the influences on HRM practices (Minbaeva, 2021). These technologies have brought newer vocabularies in the HRM disclosure that is alerting the professionals of HRM. There are newer ways of performing business that are radically changing the management of workforce practices and the creation of new services and products. This helps to visualize different processes and virtually collaborate with the synthetic reality of the interplay. Execution of the process of recruitment results in e-recruitment that could be addressed widely in the literature that is present. This research helps in revealing different companies for establishing the systems of e-recruitment and getting quicker responses among the applicants of the company.

The trend in the usage of information technology has transformed the retention and selection of different employees, thereby impeding their effectiveness. The IoT applications in HRM often involve modifications and changes in the HR technologies, thereby improving employee performance and the HR actors. The ESS or Employee self-service allows the employees to manage their personal data rather than relying on the professionals of HR. This helps them to register for training purposes with the objective of the gains that are related to efficiency. Monitoring of electronic performance is potentially changing the HR practices that include selection, evaluation, and training. The EPM forms have been used widely and arguing that the microchip wrists implants in the desk hardware could be used for future monitoring purposes. These technologies of algorithms could help the employees to evaluate the virtual techniques that help to interact in digital environments. This enhances the organizational interaction for facilitating organizational learning.

The implications remain unclear for the employees since the jobs increase and their nature also changes. There are newer skills that are required for communication and problem-solving approaches. This is hard for several computers to match and often declines employment and growth in contingent forms. The HRM transformation eliminates the distance constraints and the risk of direct contact among the stakeholders (Abdurakhmanova et al. 2020). Several dangers still lurk behind the HRM, suggesting that this technology should be viewed as a support of decisions for enhancing the HR professionals in an organization. Artificial Intelligence can be observed as the computing technologies that help stimulate the intelligent behaviors that are relevant to the different activities that they often perform. The research areas around the applications of AI are primarily related to the concepts of machine learning and deep learning. The AI domain encompasses the job replacement context and the decision-making and recruiting.

## Data Analysis and Discussions

### Theme 1: Impact of HR Digitalization on Employees

In the present time, the world is changing on a continuous basis, and there are several circumstances that could affect the organizations in their decision-making process. Significant changes have been observed with the introduction of newer technologies that are creating different flows in business prospects. There are several organizations that rank their people according to their abilities and skills in order to perform several tasks that include several requirements in the Department of HR. A significant problem in different organizations is the management of human resources for the maintenance of employees and their evaluation. In the present time, several organizations use advanced methods and systems for the management of human resources (Simaet al. 2020). The impact of the technologies that have been emphasized in the economic knowledge has been taken as Primary input. The management of human resources has developed over the years from the traditional style of resource strategy to impacting newer technologies for improving the quality of human performance.

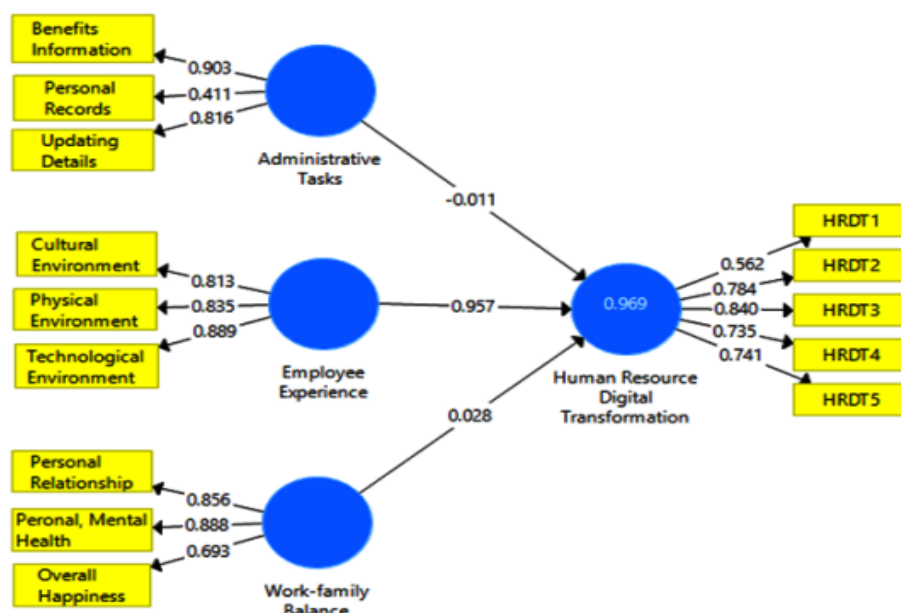


Figure 6: Structural Equation Modelling of HRM

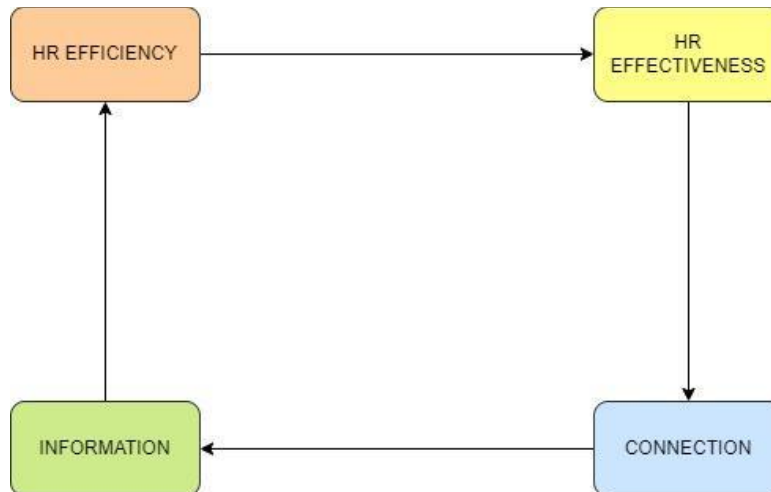
(Source: Simaet al. 2020)

Figure 2 depicts the structural equation model that helps to understand the process of managing administrative tasks by E-HRM. The impact of employees' experience and the process of balancing their work and life together through the introduction of E-HRM is acknowledged. Technologies are constantly changing in different professional fields, and there are digital tools that have been introduced in the business process, such as the management of human resources. In the HR environment, digitalization is considered a tool for reducing communication costs, thereby working efficiently and effectively. These digital technologies will be changing the nature and organization of the work. E-HRM often allows the appraisals of performance on the corporate web interface. This indicates that the employees and the managers could submit their data performance directly to the Department of human resources in electronic form. Both directors and supervisors use the receipts for the analysis of the performance of managers and staff. This method has been criticized, and the receipts have been used by both the supervisors and directors. This reduces the time and cost of all the HRM departments. Digital offices often cover the different technologies that different people use at work and are presently in operation. It helps several enterprises modernize the functions of human resources, thereby providing them with an advantage (Vrontiset al. 2022). Selection and recruitment are the important functions of the HRM that have been followed by the completion of the selected candidates. The electronic requirements have been designed in order to make the process of recruitment more effective and efficient. Digitalization in the development and training portions is considered one of the most important parts of the industry. Proper development and training are provided to the employees that will lead to success in their objectives and goals in their organization. Modern technologies are displaying videos that are related to their work, thereby revolutionizing the techniques of teaching.

Human life and modern-day technologies are related closely and are continuously making professional lives more comfortable. There remains a strong connection among the leading processes in the field of digitalization that transcends time limits and also reduces overall costs. The primary aim of this study is to analyze the technological importance in the development of human resources, thereby analyzing their weaknesses and strengths. The technical impact is an analysis need that ensures competitive advantage in the market. Connections between the factors have been made possible by the innovation of newer technologies. There are several analyses that have been done on the management of human resources in the innovation of technologies. Recruitment has become the most important process in HRM that has been pronounced in digital technologies. In the present time, there are several recruitment platforms that are adapting to the rapid technical developments, thereby increasing their effectiveness in the process of recruitment. The process of digitization could be understood as a process that is technical and represents the human era. It should be understood that the process of adaptation could be used as a primary weapon, and there would be several things that are inevitable. The nature of humans is always divided into two different camps that have embraced the pessimists in changing their point of view. The impact of technology is present in several fields, such as social and economic, that is related to the fields of technology. The economy of the world has embraced the changing spirits that could be adapted and affect the Human Resources process, such as selection, recruitment, and training. Digitalization has been improved by the management of human resources to make it more effective by facilitating different processes.

## **Theme 2: Benefits of digitalization of Human Resources in the IT sectors**

The transformation of HR in the digital world is a hot topic among different organizations. There are digital technologies that have the potential to transform and talk about the digital transformation of HR. The digital transformation of HR has several benefits and other negative effects on the industry. The introduction of the digital transformation process is changing the HR operational process and making them data-driven and automated (Donnelly and Johns, 2021). The digital transformation of HR in the information technology sector has different perspectives of employees. These IT companies are considered to be the engineering pioneers in innovation and technologies that have been driven to a significant extent. The primary role of digital technologies is increasing on a rapid scale due to the increase in the environments of business for considering competitive advantages. There remains an influence of the usage of digital technologies in different areas, such as the personal life of an employee and their administrative tasks in the management of human resources. The digital transformation of the human resource has different levels, such as digitalization and digital transformations. Scanning is considered to be the process of symbolic dimensions and the material process by converting the analog signals into different bits for easy transfer of data.



**Figure 7: Contribution of the digital human resource management**  
(Source: Flores et al. 2020)

The process of digitization helps to execute different information in different systems. It could be used as a storage of memory and communicating messages that have been digitized that, includes atoms or punch cards and transistors made of silicon. It has been considered the fourth revolution in the industry that could influence the different domains of human activities. The transformation in the digital era is an effective utilization of technical innovations that could change the existing procedures and increase consumer expectations (Flores et al. 2020). It has attracted the highest consideration among the operations of different businesses. In the present time, the digital transformation concept has gained significant importance in research practice and management. These transformations often bring changes in the operations of a business. It also inspires several methods of processes in an organization, both externally and internally. It further encourages exploring and searching the contents of social media that the consumers have empowered. Human resources have been considered as the administrative functions that are leading different organizations worldwide with the help of transformation digitally. In the present time, HR is facing a rapid change in the digital areas of the workforce. This workforce often deals with management practices, thereby enhancing innovation and creativity and facilitating talent inside an organization. Digital workplaces often use advanced and modern communication tools for facilitating productivity and elevating the engagement of employees and their wellness. Human resources create digital operations that lead the organization by using the applications of mobile devices and different digital tools (Iqbal et al. 2019). This research helps in finding the perspective of the employees on digital transformation and the present condition of the IT sectors. The developing aspects of human resources are the career of an employee, tuition assistance, and their success rate in the digital transformation of the organization.

These transformations often deal with the strategies for implementing the procedures and policies by using different technical support in order to reduce the activities of an administration. In order to enhance and improve the work environment, digital transformation often includes supporting technologies such as robots, teleconferencing, and computerized systems for monitoring purposes. The digital transformation of human resources could be applied to support the physical resources in order to ensure a better experience for the employees. The combination of human resources and the IT sector offers new dimensions to the world. These changes towards the digital transformation help to develop cultural influences, thereby supporting multidimensional aspects in a workplace. Technical developments could be adopted in the management of human resources for the purpose of empowering and developing physical environments in a workplace. In the present time, there are several challenges in the management of human resources that help to reduce generation gaps. This will help to create a physical environment in order to overcome different obstacles present in an organization. Work-life balance is considered the most significant human resource management aspect that maintains relationships among their families (Appioet al. 2021). The practices of work-life balance have been designed according to the digital transformation for enhancing the initiatives of mental and physical health. This digital transformation ensures that the work-family balance is maintained so that happiness can be enhanced overall. The role of HR managers is to share the process of communication and develop personal relationships.

### Theme 3: Connecting employees across an organization through digital HR practices

The disruption of present technologies has been established in the patterns of employment for providing different structures of an organization. In the first step of developing the practitioners and scholars, the electronic management of human resources helps to transform the internal staffing approaches (Arntzet al. 2019). Governments are facing different challenges in the internal market labor in order to effectively use the process of HR management in the IT industries. The literature on e-HRM has been expanded significantly to focus on the important aspects of e-HRM. There are several studies that have focused on the different types of IS, thereby overlapping the labels and transforming the e-HRM. The definition of e-HRM helps to trigger a significant amount of debate and provides a significant definition of the e-HRM. There are only a few studies about the e-HRM that have adopted uniform systems in supporting the functions of HRM. This process has identified three different general IS, which are HRM systems, social media enterprises, and job portals.



**Figure 8: Trends of HR for Upcoming Days**

(Source: Arntz et al. 2019)

The HRMSs have been defined as business applications in order to manage the transactions that are related to HR management. HRM is considered as the umbrella that covers the mechanisms between IT sectors and the HRM, thereby aiming to develop value across the targeted management and employees (Piwowar-Sulej, 2021). The organizations are delaying on a daily basis which helps to reduce the bureaucracy and move the structures of fluid organizations in order to survive the present competitive business of the environment. The purpose of addressing different challenges that a government often faces is specific transformations of the e-HRM that have been done focusing on the HRM strategic activities. The transformation of e-HRM often includes integrated practices that have been developed in order to execute the business strategy by the human capital of the firm. The transformation of the e-HRM primarily consists of different activities such as internal staffing, developing an organization, and management of talent. There are few studies that have adopted the viewpoint of explicit technology centered. It is important to gain insights into the technology that is evolving and therefore driving the HRM transformations (Tariq et al. 2022). The private and public organizations are seeking to delay and therefore reduce the bureaucracy in order to guide the flow of talent in an organization. The use of employee-centric portals embodies departures from different working methods that made different experts critical of the abilities of the different job portals. In the present time, as the technologies are entering different organizations, there are new e-HRM regimes that have raised the internal labor challenges in the market theory.

The internal job portals have been attributed due to economic factors and Institutional factors. These organizations have been delivered and are moving towards the organization structures in their career progression and individual development. The experts in this research have focused on the primary challenges in order to realize the importance of e-HRM in the IT sectors.

#### **Theme 4: Advantages of E-HRM in Information Technology**

The key benefits of human resource technology include recruitment and retention, support in the workplace, and ways to administer employee self-service and employee learning. The case of business can help in the demonstration of needs, benefits, costs, and solutions that underlie the process of justification for the specific investment in HR technology. Bringing a strong and efficient business can help to demonstrate to key decision makers that proposed the approach and solution that are ready to understand the potential return on investment. One of the most immediate benefits of using IT services for human resource management is the Improvement of the efficiency of the HR team (Saeed et al. 2019). The tasks that is repetitive such as chasing the managers for the completion of probation or the review of annual performance that, is used in the automation process that can be delegated to managers. It also helps in the Improvement of the digital employee experience that uses the rapid advancement of the technology used by the consumer. Services of IT that are well-designed and well-performing can help transform employees' experience with the HR department's perception as the function to see the forward thinking and take the user experience to the next level. It will also help to save the money that is implemented in the management of IT services. The most important advantages of the HRM system is the better employee self-service, Improvement in the management of employees, raising the performance of employees for a better work environment, and a lot more. The modern HRM system allows the employees to update the initial information that engages with the HR Department. HRM system helps in accessing the database with all the information for the employees for the conduction of knowing the repetition of answers multiple times.

The implementation of this policy regarding the essential needs of employees makes the employees confident and more comfortable with the results of highlighting the benefits of a human resource management system. HRMS helps to minimize the task that is in daily life administration. It helps in improving the business workflow and visibility through charts and graphs. The wide range of features in the modern software of human resource technology makes up an important efficient tool that gives control over every aspect of employees. The advantages of HRM technologies help start the management of people earlier than the employee's status and give them the option to handle the hiring process. The system of HRM also provides a great opportunity to create a mutual place for every employee to access training articles and other materials that are helpful in the sectors of information technology (Chams and García-Blandón, 2019). It also provides an important role in the routine tasks automation process that involves the tracking process of employee's working hours, maternity status, sick and other kinds of leave. The feedback process regarding the automation of HRM in IT helps send feedback directly to the employees. The investment in HRMS helps in getting the profit on many levels that help in enhancing privacy and data protection. The management of HR helps in achieving successful protected sensitive information that is stolen or misused. HRMS also plays a payroll feature that ensures a more secure and safe way to process the payroll with password authorization and storing of the information.

#### **Discussion**

The above findings have stated the fact that there has been a presence of several challenges of E-HRM within the IT Sector. The core issue is the cost of the “**Human Resource Information System (HRIS)**” and the investments made in the upcoming days within this system (Panjaitan, 2023). A few systems run within the resistance of the management for a few tasks. Resistance has been triggered by a few systems by the involvement of inconvenient user interfaces. It has been activated by the inclusion of unworkable interfaces of the user in the case of the employees. There has been a requirement for a lot of initial investment in the implementation of the technology on the basis of the HR system.

Operational costs are reduced after their implementation, and small and medium-sized enterprises may face issues in affording portals and packages of HR. It has been analyzed that one of the greatest obstacles in HR is before the execution of innovations in the technology within the company. There has been a requirement for acceptance from the employees to utilize it to a great extent. The burden of staff is increased by the investment of a huge amount of time connected. However, an important role is played by E-HRM in the Improvement of efficiency along with effectiveness in the **HR Department** (De Alwis et al. 2022). HR Professionals are allowed to be strategic partners in accomplishing organizational objectives. Hence, it has been utilized to empower managers and workers to perform a few functions of HR.

**Cloud** and “**software as a service (SaaS)**” are used by Digital HR to automate the procedures and workflows of HR. HR is transformed by Cloud and HR processes are streamlined by it. It makes decision-making more sophisticated, and data-based and strategic approaches can be taken by the organization for workforce planning. Information technology has played a crucial role in making key decisions (AlHamadet al. 2022). This includes the recruitment of candidates by searching curriculum vitae with the help of online portals. The candidates have been selected with the psychometric test that can be conducted online, and the jobs are declared with the help of e-mails.

### Conclusion

It can be concluded that there is a need for the measurement of labor productivity by HRM. Due to the introduction of E-HRM within the IT sector, there has been advancement in the performance of the business. There has been a great impact of Digital Human resources on organizations and employees. A specific role is played by Information Technology within the functions of Human Resources. There is an introduction of a variety of applications, including digitization of wages, booking tickets, and services of training. The introduction of Information Technology in the IT sector has made the communication process faster.

IT sector recruits employees effectively in a short time, and it increases the productivity of the organization. Immense help has been acquired in the motivation of the workforce, and their moral values have been raised as well. However, several challenges have been discussed in this study about E-HRM. Among them, the greatest challenges are the execution of e-HRM as its installation possesses high charges. Moreover, another greatest demerit of EHRM is the workload of the workers, as they have to invest a huge amount of time in it. Apart from these, other grave issues are the risk of hacking of data and its loss as E-HRM can be freely accessed by anybody.

There has been a great effect of E-HRM within the IT sector, and execution of IT causes greater efficiency, and human resources have become highly effective. Line managers acquire better services with the initiation of IT within the E-HRM, and the management and recruitment of candidates have been enhanced as well. Management practice is highly advanced with the enhancement of E-HRM tools. E-HRM has a lot of benefits within IT Sector, and the first benefit is the effectiveness possessed by the team of HR. There has been a transformation in the employees' experience by highly-designed IT services.

Another major advantage in the IT sector is the acquisition of the report of the activities of each employee. The self-confidence of employees has increased with the initiation of E-HRM within IT sector, and they feel at ease while doing their respective tasks. The employees can be capable of working collaboratively with the help of the acquisition of access to the materials of training. The automation process of routine tasks includes the process of tracking of working hours of staff. Along with this, there has been an involvement of the status of maternity and different leaves comprising sick leave. The feedback regarding the performance of employees has been sent directly to them, which, in turn, enhances their performance. It has been understood that narrative analysis is essential as distinct digital technologies are introduced. Data has been gathered with the help of secondary methods, and in the collection of authentic data, authentic journals of recent times have been taken. The articles that are collected are based on the advanced technologies used in E-HRM. The main focus is provided on the articles related to the function of Artificial Intelligence and Robotics in the development of E-HRM.

### Reference list

1. Abdeldayem, M.M. and Aldulaimi, S.H., 2020. Trends and opportunities of artificial Intelligence in human resource management: Aspirations for public sector in Bahrain. *International Journal of Scientific and Technology Research*, 9(1), pp.3867-3871.
2. Abdurakhmanova, G., Shayusupova, N., Irmatova, A. and Rustamov, D., 2020. The role of the digital economy in the development of the human capital market. *Архивнаучныхисследований*, (25).
3. AlHamad, A., Alshurideh, M., Alomari, K., Kurdi, B., Alzoubi, H., Hamouche, S. and Al-Hawary, S., 2022. The effect of electronic human resources management on organizational health of telecommunications companies in Jordan. *International Journal of Data and Network Science*, 6(2), pp.429-438.
4. Appio, F.P., Frattini, F., Petruzzelli, A.M. and Neirotti, P., 2021. Digital transformation and innovation management: A synthesis of existing research and an agenda for future studies. *Journal of Product Innovation Management*, 38(1), pp.4-20.

5. Arntz, M., Gregory, T. and Zierahn, U., 2019. Digitization and the future of work: macroeconomic consequences. In *Handbook of labor, human resources and population economics* (pp. 1-29). Cham: Springer International Publishing.
6. Baykal, E., 2022. Digitalization of human resources: E-HR. In *Research Anthology on Human Resource Practices for the Modern Workforce* (pp. 200-218). IGI Global.
7. Chams, N. and García-Blandón, J., 2019. On the importance of sustainable human resource management for the adoption of sustainable development goals. *Resources, Conservation and Recycling*, 141, pp.109-122.
8. Chege, S.M., Wang, D. and Suntu, S.L., 2020. Impact of information technology innovation on firm performance in Kenya. *Information Technology for Development*, 26(2), pp.316-345.
9. De Alwis, A.C., Andrić, B. and Šostar, M., 2022. The Influence of E-HRM on modernizing the role of HRM context. *Economies*, 10(8), p.181.
10. Donnelly, R. and Johns, J., 2021. Recontextualising remote working and its HRM in the digital economy: An integrated framework for theory and practice. *The International Journal of Human Resource Management*, 32(1), pp.84-105.
11. Fernandez, V. and Gallardo-Gallardo, E., 2021. Tackling the HR digitalization challenge: key factors and barriers to HR analytics adoption. *Competitiveness Review: An International Business Journal*, 31(1), pp.162-187.
12. Flores, E., Xu, X. and Lu, Y., 2020. Human Capital 4.0: a workforce competence typology for Industry 4.0. *Journal of Manufacturing Technology Management*, 31(4), pp.687-703.
13. Iqbal, N., Ahmad, M., Raziq, M.M. and Borini, F.M., 2019. Linking e-hrm practices and organizational outcomes: empirical analysis of line manager's perception. *Revista Brasileira de Gestão de Negócios*, 21, pp.48-69.
14. Minbaeva, D., 2021. Disrupted HR?. *Human Resource Management Review*, 31(4), p.100820.
15. Muhammedrisaevna, T.M., Mubinovna, R.F. and Kizi, M.N.U., 2020. The role of information technology in organization and management in tourism. *Academy*, (4 (55)), pp.34-35.
16. Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A. and Trichina, E., 2022. Artificial Intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*, 33(6), pp.1237-1266.
17. Panjaitan, E.H.H., 2023. Implementing Human Resource Information System (HRIS) for Efficient Human Resource Management. *International Journal of Science and Society*, 5(2), pp.128-139.
18. Piwowar-Sulej, K., 2021. Human resources development as an element of sustainable HRM—with the focus on production engineers. *Journal of cleaner production*, 278, p.124008.
19. Roztock, N., Soja, P. and Weistroffer, H.R., 2019. The role of information and communication technologies in socioeconomic development: towards a multi-dimensional framework. *Information Technology for Development*, 25(2), pp.171-183.
20. Saeed, B.B., Afsar, B., Hafeez, S., Khan, I., Tahir, M. and Afridi, M.A., 2019. Promoting employee's proenvironmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management*, 26(2), pp.424-438.
21. Sima, V., Gheorghe, I.G., Subić, J. and Nancu, D., 2020. Influences of the industry 4.0 revolution on the human capital development and consumer behavior: A systematic review. *Sustainability*, 12(10), p.4035.
22. Strohmeier, S., 2020. Digital human resource management: A conceptual clarification. *German Journal of Human Resource Management*, 34(3), pp.345-365.
23. Tambe, P., Cappelli, P. and Yakubovich, V., 2019. Artificial Intelligence in human resources management: Challenges and a path forward. *California Management Review*, 61(4), pp.15-42.
24. Tariq, E., Alshurideh, M., Akour, I. and Al-Hawary, S., 2022. The effect of digital marketing capabilities on organizational ambidexterity of the information technology sector. *International Journal of Data and Network Science*, 6(2), pp.401-408.
25. Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A. and Trichina, E., 2022. Artificial Intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*, 33(6), pp.1237-1266.
26. Yong, J.Y., Yusliza, M.Y., Ramayah, T. and Fawehinmi, O., 2019. Nexus between green intellectual capital and green human resource management. *Journal of cleaner production*, 215, pp.364-374.