

## Technology and human resource management: Some observations

**Prakash Shrestha, Ph.D.**

Lecturer, Nepal Commerce Campus, Faculty of Management, Tribhuvan University

Email: prakash.shrestha1@ncc.tu.edu.np

<https://orcid.org/0000-0002-6973-9343>

### Cite this paper

Shrestha, P. (2021). Technology and human resource management: Some observations. *NCC Journal*, 6(1), 51-56.

<https://doi.org/10.3126/nccj.v6i1.57816>

### Abstract

This paper aims to explore some impact of technology on human resource management. It also observes some recent technological trends that redefine human resource management. This paper mainly reviews and describes scholarly papers, articles, professional research work, and research reports of different national and international organizations to observe the impact of technology on human resource management and some recent technological trends that redefine human resource management as well. It is found that the areas of human resource management where technology has a significant impact include recruiting, employee selection, training and development, ethics and employee rights, motivating knowledge workers, pay plans and employee benefits, communication, decentralized work site, skill levels, and legal concern. Today's business organizations also need to focus on some recent technological trends (such as big data, mobile apps, social media, cloud technology and SaaS, and wearable technology) that redefine human resource management.

**Keywords:** Human resource management, Impact, Observation, Technology, Trends

## Introduction

Human resource management (HRM) involves a variety of processes, including hiring, developing, and rewarding employees of an organization. Technology supports effective management of human resources in the organization.

Technology has had the biggest impact on the workplace during the past few decades. Technology is a process of transforming inputs into outputs. It is made up of knowledge, procedures, tools, and systems. The internal work processes of firms have altered as a result of automation, computerization, robotics, information technology, and artificial intelligence (Adhikari, 2009). Technology, work activities, information, and people are all combined in the work system to ensure performance in organizations (Adhikari & Shrestha, 2020). Therefore, any modifications to workplace technology will have a significant effect on how the work system is managed. Particularly, the adoption of high-speed computers, the Internet, and other contemporary technologies at work has significantly altered HR methods.

The use of technology is crucial to business operations. Almost every firm and sector aspires to incorporate technology of some type into daily operations (Shrestha, 2021). Technology is evolving pretty quickly these days. It is anticipated that work productivity and product and service quality will increase, particularly with the advancement of information (Saarikko et al., 2020) and manufacturing technologies. This is the reason why so many businesses are utilizing these effective technologies. However, firms need a knowledgeable, creative, and motivated workforce to handle efficient technology and ensure quality and innovation. In reality, a number of company HR procedures should adopt these improvements.

Technology is now being used much more frequently in human resource management. The way human resource managers carry out their duties has changed as a result of technology. For instance, in many firms, HR specialists are increasingly serving as the main information source. Information can be sent fast and easily through

Facebook, Twitter, e-mail, company intranets, and webpages (Decenzo, Robbins, & Verhulst, 2013). Technologies have crucial implications for human resource management. They also have a crucial impact on the role of HR professionals (Çunaku, 2019). For instance, implementing human resource information systems (HRIS) can have a lot of advantages for the HR department as well as line managers and the entire organization. With the use of such HRIS, human resource specialists can collaborate strategically with upper management (Bal, Bozkurt, & Ertemsir, 2012).

Managers can access information and data, do analyses, make choices, and engage with others in this new era of internet-based HR systems without consulting the HR department (De Alwis, 2010; Bakheet, 2020). By making decisions and changing records, employees can also exercise control over their own personal information. As technology advanced, businesses started to question how HR managers' roles would change. By putting more of an emphasis on talent management and personal development than on hiring and data collection, HR managers are now more instrumental in accomplishing company goals and objectives (Kaur et al., 2014). Furthermore, with the support of HRIS, HRM professionals can better facilitate human resource plans, make speedier decisions, clearly define positions, evaluate performance, and offer employees reasonable benefits. In fact, technology supports enhancing communication between the workforce and the general public (Decenzo et al., 2013). The adoption and use of technology have made it an integral component of the modern world, and this has had a variety of effects on human resource management around the world. The advent of the internet and intranets has revolutionized global business. Therefore, long-term growth and efficiency of businesses are facilitated by rapid technology change for key stakeholders (Yubaraj & Suganthiya, 2021).

Based on these facts, this paper aims to explore some impact of technology on human resource management. In order to determine how technology is affecting human resource management, it primarily assesses and summarizes scholarly journal articles, professional research projects, and research reports from various national and international organizations.

## **Methodology**

This paper used desk research, particular real-world instances, and different studies to track how technology has affected human resource management practices. Key effects of technology on human resource management practices are presented using additional literature that specializes in the relationship between technology and such practices. In fact, this paper mainly reviews and describes scholarly papers, articles, professional research work, and research reports of different national and international organizations to observe the impact of technology on human resource management and some recent technological trends that redefine human resource management as well.

## **Impact of technology on human resource management: some observations**

Technology supports HR managers in doing their duties more quickly, making better business decisions, and maximizing the potential and productivity of their workforce. Information technology in particular has significantly changed the methods and procedures used in human resource management (Stone et al, 2015; Wang & Ma, 2021). The following are the areas of human resource management where technology has a significant impact (Decenzo, Robbins, & Verhulst, 2013):

### **1. Recruiting**

One of the most important aspects of recruiting is contacting a pool of qualified applicants. Technology, particularly the Internet, has changed recruitment practices. For example, job postings on the Internet have largely replaced word of mouth, newspaper advertisements, and college visits. HR managers can access a bigger pool of prospective employees by posting job openings on company websites or particular job-search websites. This also helps them assess if applicants possess the most fundamental

technological abilities. Furthermore, many companies now ask applicants to provide an electronic version of their résumé rather than a paper one.

## **2. *Employee selection***

Technology-based firms find it particularly challenging to choose good employees because they need a special mix of technical and professional skills. For employees to flourish in today's demanding cultures, they must be intelligent and flexible. Once candidates have been found, HRM must thoroughly screen them to make sure they are compatible with the organization's culture. It's easy and quick to investigate applicants' backgrounds thanks to a variety of web resources. Computer-assisted HRM selection techniques primarily help in choosing people who are team players, have good stress and uncertainty management skills, or suit the business culture.

## **3. *Training and development***

Technology is also changing how HR managers support people in managing their careers and guide, train, and develops them. Because of the Internet, managers may provide their staff members with on-demand web-based training and development whenever they have the time to devote to it. Online courses for management development and language learning, for instance, are becoming more and more popular. Through teleconferencing technology, such as webinars or video streaming, workers may train and cooperate in groups regardless of where they are.

## **4. *Ethics and employee rights***

Employee rights and ethics are impacted by technology. One issue that pits an organization's need for control against an employee's right to privacy is the electronic surveillance of personnel. The ethical question of how far a business should go in monitoring its employees' conduct while they use computers is only made more complicated by the advent of increasingly powerful surveillance tools. One major example is increased reliance on technology, which can provide either good or bad news in the workplace. Despite the fact that technology is a valuable resource for knowledge workers, it also provides ample opportunity for misuse and non-productive work behaviors. Mainly, misuse of the Internet and e-mail is common in the workplace.

## **5. *Motivating knowledge workers***

Knowledge workers of today heavily rely on technology. However, HR management must focus on inspiring these people. Distractions seem to be more likely to undermine these workers' efforts at work and lower productivity in these workers. Employees are assigned to work, not to browse the internet checking stock prices, gambling at online casinos, or purchasing presents for family or friends, according to the common belief of employers that they must be watched at all times. Such leisurely online browsing at work costs more annually in lost productivity and squandered computer resources. Because of this, businesses will spend a lot of time and money. In order to ensure that employees are motivated to perform their duties efficiently utilizing technology, HR managers must pay attention to this issue.

## **6. *Pay plans and employee benefits***

Technology facilitates the collection and analysis of employee data in order to obtain a comprehensive picture. With the help of technology, pay structures, and benefits packages for employees can be created, including signing bonuses, stock options, automobiles, free health club memberships, full-time on-site concierges, and cell phone bill subsidies. HR managers can use technology to make the compensation and growth system fair and transparent. Attractive incentives and benefits are essential to retaining technical and professional employees.

## 7. *Communication*

Technology has a significant role in the company as a communication tool. Employees can communicate with anyone directly through it without using conventional methods. Traditional corporate communication pattern flows are streamlined by these open communication platforms. Additionally, they alter how conferences, discussions, supervision, and meetings are handled. For instance, social networking networks like Facebook, LinkedIn, Twitter, and others let workers communicate regardless of their position or location. Additionally, employees in Nepal and the United States can now communicate about business matters more readily than offline employees based in other countries.

## 8. *Decentralized work site*

Decentralized work environments or workplaces have been made possible by technology. With the increased usage of computers, fax machines, email, and internet networks, several jobs no longer require employees to work from 10 a.m. to 5 p.m. in an office setting. Instead, they can report to the corporate office from home using a computer link. This is sometimes referred to as telecommuting (also known as flexible working environments, remote jobs, telework, working from home, and mobile jobs). In industrialized countries, this type of dispersed work site will boost the economy by using less space and raising labor expenses. Decentralized work locations, however, help employees reconcile work and family obligations. However, the successful implementation of such decentralization depends on the HR department's ability to develop a proper reward system and performance appraisal system to motivate employees to work with more commitment. Organizations are interested in HR practices to get advantages from the use of decentralized worksites.

## 9. *Skill levels*

A vast range of contemporary technologies need highly skilled workers. Employees must be able to read and comprehend technical periodicals, reports, and manuals for software and hardware. Additionally, technology has increased industry competition. It makes it possible for businesses of all sizes and market share to develop, launch goods quickly, and satisfy demands from customers. In recent times, globalization allows individuals to compete on a global scale when purchasing or providing services. Because of modern technology, skilled workers in Nepal can provide technology, programming, radiology, and financial analysis services just as easily as workers in any other country in the world.

## 10. *Legal concern*

The use of contemporary technologies has given rise to legal questions. Every organization needs a clear policy that spells out what usage of work email, social media, and the Internet is acceptable and wrong. Employees need to comprehend that when using e-mail, blogs, and social media, there is no such thing as privacy and that personal comments and photos are frequently subject to disciplinary action if they can be interpreted as discriminatory, harassing, or untruthful (Decenzo, Robbins, & Verhulst, 2013). So, technology has created a legal concern in HR management.

## **Recent technological trends that redefine human resource management**

Technology has a big impact on human resource management. This section presents the recent technological trends that redefine human resource management (Katayani & Rani, 2017).

### 1. *Big data*

HR workers can use Big Data to gain deep insight and make decisions based on important facts. It helps HR professionals communicate with and market to target audiences and gain a deeper understanding of current consumers. HR managers may identify emerging trends and gain a fact-based picture of the current workforce as a result of big data.

## 2. *Mobile apps*

Today, every application that a business creates must have mobile apps. The world of human resources has started to be dominated by smartphones. As workers from various activities demand access to applications via mobile devices, businesses are thinking about implementing HR systems (<https://financesonline.com/6-technological-trends-redefine-human-resource-management/>). By offering this level of capability, businesses imply that they will evaluate HR software in light of the mobilization process and the user interface that employee desire. Additionally, the trend of creating software that simplifies fundamental HR functions is ever-evolving.

## 3. *Social media*

Social media has become a significant aspect of HR, especially for hiring. Employers actively search for candidates on social media sites like Facebook and LinkedIn. HR divisions can use social media for both employee engagement and recruitment. It is seen as a crucial tool for businesses trying to achieve their HR objectives. Businesses can use social media networks to engage with their target audience by posting information about their companies, job openings, and other topics. HR professionals may find social media useful in a variety of ways, including keeping up with news, technology, and trends.

## 4. *Cloud technology and SaaS*

SaaS apps, whether web-based or native, are crucial in every sector, including human resources. Cloud-based business apps are given in the current business climate. Prior to the development of the cloud, gathering and storing data was quite challenging. All information, including documents and other pertinent data, may now be accessed online thanks to the development of cloud technologies. A secure place can be used to store and organize employee data (<https://financesonline.com/6-technological-trends-redefine-human-resource-management/>).

## 5. *Wearable technology*

All of the top companies, including Apple, Google, and Microsoft, have begun to use wearable technology in their products. These wearable technology devices can help employees better manage their time and stay connected. In fact, wearable technology offers a variety of chances for employee involvement, including increased output, incentive-based benefits, and security. Wearable technology improves communication and productivity.

## **Conclusion**

The use of technology is now inevitable in the modern world. Technological advancements can significantly affect a company's human resource management practices. Business organizations can improve their internal processes, core competencies, target markets, and overall framework by using technology in HRM effectively. In terms of human resources, the strategic objectives of the company must come first. As a result, modern organizations must unavoidably adopt the technological and information age trends. They must use big data analysis to deepen the work of various modules, realize the informatization of human resource management, and implement informationized human analysis to improve the accuracy and science of human resource management (Zhenbing, 2020; Wang & Ma, 2021). Technology will almost always promote effective HRM practices; therefore underestimating it is highly impractical. Additionally, increasing process efficiency raises the standard of the HR division as a whole. The effectiveness of the company may suffer if it is left behind in technological innovation.

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