

Technological Transformations in HR: A Conceptual Study on Emerging Trends and Opportunities

Shweta Pandey¹, Pragya Goel², Dr.Parul Agarwal³

¹Shweta Pandey, Department of Business Administration,
ABES Engineering College, Ghaziabad, India

²Pragya Goel, Department of Business Administration,
ABES Engineering College, Ghaziabad, India

³Dr. ParulAgarwal, Department of Business Administration,
ABES Engineering College, Ghaziabad, India

Abstract:

The research paper focuses on the ongoing effects of emerging technologies in organizations. New technologies, with their diverse forms, are completely revolutionizing the world of work changing organizations functions and evolving the nature of leadership, managerial roles and professional careers. They have been emerging as the fundamental elements of business and industry throughout the world, driving the development of the two most powerful forces in the global economy. Recent indication shows that the latest technology such as artificial intelligence and robotics are being employed by organisations to automize simple and repetitive task as well as to make complex decisions quickly and more accurately. However this will create a number of challenges for HR professionals who will need to help employees to update their competencies for their future wellbeing.

Key Words:artificial intelligence, economic growth, technological advancement, competencies, decision making

Introduction:

Since last many years, a huge amount of attention is drawn towards the impact of technological advancement on the work, sometimes it is being described as the changing world of work by some consultancies. Few commentators also suggested that technology advancement will lead to multiple changes in the workplace as well as in working environment. It reflects as dramatic as the collaboration of the traditional employment relationship with the modern one, and the huge widespread usage of Artificial reality or the artificial world instead of travel and the replacement of individuals with Artificial intelligence (AI) and robotics also. It is absolutely correct to say that the most recent advancements or up gradations in technology, such as Artificial intelligence ,Robotics, Big Data, Python - all are having a dramatic effect on the workplace and even on working as well. Indeed, we are visualizing the rapid growth in the use of Artificial Intelligence and Robotics to automate the simple and the repetitive tasks such as factory work, office work and many back-office duties; and to take many complexes in the organization. A recent study was founded that

around 47% of total employment is completely in the high-risk category – i.e., jobs expected to be automated over the next decade or two

Technological advancement is often described and fully associated with other rapid changes within the world of work that may be facilitated by the advancement of the technology itself, for example, the disintegration of the traditional employment relationship with the modern one and to be well replaced by gig economy work; an increased completely emphasized on agility at work; and a new generation or future of employees with multiple different attitudes to the previous workforce. Amongst all of them, the propaganda completely surrounds the impact of technological advancement on the future of work or even workforce as well. However, it remains pretty unclear what are the actual evidence basis in relation to this and what are the different roles of the human resource (HR) functions that will be in support of the organization and its employees in navigating these changes.

Literature Review:

The classified data immensely identified a number of advance emerging technologies that are likely to have a huge impact on the future of work and workforce and therefore have a vital implications for the function of human resource. First and foremost, digital platforms were clearly showed to be used commonly within the work and recognized as a central to online marketplaces such as Amazon or e-Bay and to labour market

platforms as well such as Uber or Freelancer.com (Morgan, 2014; Zysman & Kenney, 2018).

Second, AI and Machine Learning were prominent within the published evidence and mostly applied for data analysis, ending patterns and making predictions (Government Office for Science, 2015).

Third, ROBOTICS was seen as affecting employment as industrial robots have increasingly taken on routine tasks usually performed by manufacturing workers (Frey & Osborne, 2017).

Fourth, augmented and virtual reality (AR and VR) are demonstrated to be playing an increasingly significant role in industries such as healthcare, construction, oil and gas and aerospace (Higgins, 2017).

Fifth, wearable devices are increasingly being employed in the workplace to improve employees' awareness about their personal wellness, to track employees' progress and plan measures to sustain their engagement (Kim et al., 2012; Moore & Robinson, 2016; Moore & Piwek, 2016; Wilson, 2013).

Finally, Block Chain, a most vital emerging trend was suggested as being used for the transactions and information exchange that requires a high level of security and up gradation (Wright, 2018; Yli-Huumo et al., 2016).

These new emerging technologies will present a number of challenges for the HR functioning department and for people management more broadly and largely (Bondarouk & Brewster, 2016; Marler & Parry, 2016; Stone et al., 2015).

Organizations are required to build a strategy so that they can take most benefits from these technologies, for example to build efficiency in working and to improve the accuracy of decision-making, while also well addressing any potentially negative impacts on employees as well. The role of the HR function in facilitating, or mitigating, the potential effects of latest emerging technologies on the workforce are presented briefly below.

Recently, Automation and changing skills requirements evidence suggests that there are enormous and most innovative financial incentives for employers to increasingly automate their (currently human) processes (Mark off, 2011) and that advances in automation could dramatically changes the nature of jobs available (PWC, 2017). Realistically, whether a task can be automated depends on the ability of coders to write a set of procedures that will improve the problem specification and account for every possible contingency (Frey & Osborne, 2017). Despite with this limitation, automation is continuous increasingly being used in areas that require the storing or access of information (Frey & Osborne, 2017), such as in fraud detection, medical diagnosis (Cohn, 2013; Wolcott, 2018) and law (Mark off, 2011). In addition, the automation of the manual tasks is rapidly increasing widespread, including tasks such as driving (Autor et al., 2003; Veres et al., 2011), cargo handling (Bloss, 2011) and mining (Frey & Osborne, 2017).

The vital role of HR practitioners in the process of automation is not clear from the evidence, but it would completely seems that they could play a

key role in identifying tasks (and thus eventually roles) that could be automated. Perhaps more important however, is the HR function's role addressing the impact of job losses as a key result of automation (Frey & Osborne, 2017; PWC, 2017).

Not only should HR practitioners be central to supporting the employees through a period of uncertainty while such decisions are made, they should be responsible for considering how employees can be re-skilled or up-skilled in order to replace old or obsolete skills so that they can be retained in the workforce for longer period of time. The evidence suggests that the type of knowledge, skills, and abilities required by organizations will change. For example, the need for routine cognitive and manual skills is decreasing, while the need for non-routine cognitive and manual skills has increased (Autor et al., 2003).

Research suggests that organizations will need a workforce with increased skill variety, autonomy, and interdependence, as well as increased cognitive, creative, technical and social skills, (Liu & Grusky, 2013; Wegman et al., 2018), to complement machines (MacCrory et al., 2014) and to perform the remaining tasks that are not automated (Makridakis, 2017). The HR function has a key role in ensuring the recruitment and development of these competencies as well as in designing leader development programmers that consider the new challenges related to managing employees in a modern work context and in coordinating humans and machines (Frey & Osborne, 2017).

Objectives of the Study:

1. The main objective of this research is to get an overview of technology trends and applications which employers are using to manage talent acquisition and retentions.
2. To find out the common technological challenges and their best possible solutions for employers to consider in organization.
3. To know about the impact of emerging technologies on the employees and how it leads to the betterment for future.

Need of the Study:

1. The need of the study is to understand the Machine learning aspects in HR that is changing the nature of work and the structure of the workplace.
2. It helps HR professionals setting the pace with new performance management models, new learning methods, new ways to reduce bias, and new approaches to recruit and train people.

Scope of the Study:

- 1- The research has a major application in the field of personnel management.
- 2- It takes towards the organization welfare through the use of artificial intelligence, robotics etc.

3- It has a wide scope towards maintaining the industrial relations and solving out the grievances and providing the optimal solutions.

The Impact of Emerging Technologies on HRM:

The scenario suggests a role for the HR function in navigating the changes to work, the workplace and the workforce that are driven by technological advancement. However, it is important to note that emerging technologies have been showcasing to also influence the way that organisations usually undertake their HR activities. The principal HR functions of attracting, selecting, developing, motivating and retaining talented employees in organisations remain important, but potentially require different approaches in the future world of work.

Research Methodology:

Research problems tend to be different from each another and so it requires own special emphasis and different approach .Since the entire research problem is unique in some ways, the research process has to be typically customized.

The present paper aims at finding the extent to which emerging technologies helps in the advancement of country and its economic growth. The present research is descriptive in nature.

Under this research, the method used is triangulation method which means using more than one method to collect data on the same topic. This is the way of

assuring the validity of research through the use of a variety of methods to collect data on same topic.

The elimination of obstacles for technological advancement requires a major change in HR technology which leads to further enhancement of employees and the countries growth.

The basic requirement in development of technological aspect is to make aware the new working environment for the welfare of employees regarding the existence, the unique identity and the contribution towards the economic growth and development of country.

Findings:

The results identified a large number of emerging technologies that are likely to have a demonstrating impact on the future of work and therefore have implications for the HR function.

- Digital platforms were shown to be used commonly within work and are central to online marketplaces such as Amazon or e-Bay and to labour market platforms such as Uber or Freelancer.com
- AI and machine learning were prominent within the published evidence and mostly applied for data analysis, finding patterns and making predictions for future.
- Robotics was seen as an affecting employment as industrial robots have continuously increasingly taken out routine tasks usually performed by manufacturing workers.

- Augmented and virtual realities are demonstrated to be playing an increasingly crucial and significant role in industries such as healthcare, oil and gas and aerospace.
- Wearable devices are increasingly being employed in the workplace to improve employees' awareness about their personal wellness, to track employees' progress and plan measures to sustain their engagement.
- Finally, block chain was suggested as being used for transactions and information exchange that requires a high level of security

Conclusion:

The findings of the evidence review and above discussion suggest that emerging technologies such as AI, Robotics, VR &AR, Digital Technologies and Block Chain have the potential to affect work and employees significantly.

The degree and speed of this rapidly increasing impact completely depends to a large extent on developments in the technologies themselves and the willingness of organisations to adopt them as well. This review also indicates that the HR function has a key role to play in helping employees to navigate the changes to the world of work particularly in relation with the skills development, work organisation and mental health.

While the key activities involved in HRM – to support managers in employees in going about their daily work are unlikely to change, the role of the HR function day by day may become even more important or crucial as both the potential benefits and

risks of emerging technologies for employees develop.

Whether the HR functions can successfully be undertaken, this role depends upon their own skills development and their own understanding of technologies and their implications. It is suggested that sustaining the digital engagement in the future workplace will become a key part of the HR role.

It is also assumed that the role of the HR function is also to develop and support employees in order to ensure their growth and wellbeing, as well as the sustainability of the organisation, against the backdrop of this technological advancement.

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