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DYNAMISM IN HUMAN RESOURCE: INDUCTION OF ARTIFICIAL INTELLIGENCE

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Abstract

The technology change is demanding skilled individuals to be at par with it.Human resource is putting baby steps towards re-defining its meaning. Its functions are separately emerging as its modifications. Human resource management has reinvented itself as two broad verticals: human resource development and human capital management and it is looking forward for further discovering its evolution as artificial intelligence (AI) is taking part in various functions of it. The question that arises here is, islabour force ready to take load of such technological advancements? The paradigm of human resource has changed many folds. AIis contributing towards the efficiency and effectiveness of work done by humans but at the same time it shifting human labour intensive framework to a self-functioning smart system which is minimally dependent on human intervention. AI is gradually changing the future of work. Tasks are getting more technical, leaving no place for any clerical work. At the shop floor, machines are overruling. As some roles are shrinking, especially the monotonous ones, new opportunities are also appearing from the horizon. AI should be seen as augmentinghuman activities rather than a replacement.Workforce needs to acquire specific skills to gel with the evolving AI.

***Keywords**: Artificial Intelligence, Human Resource, Technological Unemployment, Automation*

1. Introduction

Our purpose is to examine the ever changing dimensions of human resource management. The arena of Human resource management is not limited to management of people of the organisation. As now artificial intelligence is introduced in the human resourcefunctions,which will further change and give birth to the new areas of activities, needs to be done in the organisations. In this paper secondary data from authentic sources is used to support the arguments. This paper is a contribution towards defining the aspects of human resource dynamism, brought to us by technical innovations. The ever changing technological environment and the changes that needs to be opted, in order to be at par with the technological advancements like artificial intelligence for the organisations as well as for its stakeholders. AI implementation in HR functions is making tasks cost effective and efficient. This paper suggests the AI models that can be used in different HR functions, their merits and future possibilities along with the challenges and shortcomings. AI is making tedious work easy to handle. Efforts and time consuming tasks, earlier performed by humans are now performed by smart machines running

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on programs which learn with every example or task it handles. The time and efforts so saved are put into key activities which are essential to perform. Over the years HR functions has become more focused on the efficiency of workforce and their satisfaction along with productivity. AI have solutions for all HR functions, it tries to give satisfactory results to its users. Undoubtedly, AI is evolving rapidly to be as intelligent as humans but the repercussions of this is human is losing their jobs to AI. AI should be applied in such a way that it augment the HR activities. Human cannot be more efficient and effective than machines but can learn to adapt to change and look for new roles generated by it and modify his work and skills and knowledge accordingly.

2. AI in Human Resource Management Functions

Many companies have opted AI in their HR functions and the implications of such changes is a debatable topic today. Some believe that AI is killing the human jobs and will kill more in future, some argue that it is not killing but replacing the jobs and going hand-in-hand with human. [1]

2.1 Recruitment and Selection:

Recruitment and selection are the processes in which AI is being gradually inculcated very easily and accurately. In the process of selection, AI will match the resume of the respective candidates and shortlist the suitable candidates for the job. Not only in the process of selection but also in the process of recruitment, AI can conduct the interview which is filled with pre-designed questions and judge the employee on his capabilities. This can further be enhanced by making it real-time adaptive for every individual applicant, based on the responses the AI system receives as an input. AI aid the HR manager in this decision making process. [2]

2.1.1 Shortlisting of resume via AI

In the process of selection, AI will match the resume of the respective candidates and shortlist the suitable candidates for the job.

2.1.2 Mediating Group Discussions via AI

AI can record and observe the group discussions. It can then draw meaningful insights from the responses of participants and thus can help in shortlisting.

2.1.3Interviews via AI system

AI can conduct the interview which is filled with pre-designed questions and judge the employee on his capabilities. This can further be enhanced by making it real-time adaptive for every individual applicant, based on the responses the AI system receives as an input

2.2 Training and Development:

Training and development programs can be done efficiently and effectively by the online training courses designed for the employees to learn new skills. M/s Genpact is applying this technique to educate and enhance

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the employee's skills. Whenever there is any change in process of performing any task, the system reminds the employee to complete the training within a specified time. A level up of this feature could be having the respective competencies of each employee mapped in a central database. For every new joinee, this mapping could be done at the time of recruitment itself and for existing employees, this information can be compiled by short surveys and tests. This shall help in identifying the gaps between the requisite competency for a particular job role (which keeps augmented with time and requirements) automatically. It could then be further utilised to deduce the aspects for which a employee is needed to be trained for enhancing his/her contribution and productivity. This shall also help in increasing the employee satisfaction, as now they'll be prompted for new learning avenues automatically. See below Fig.1:

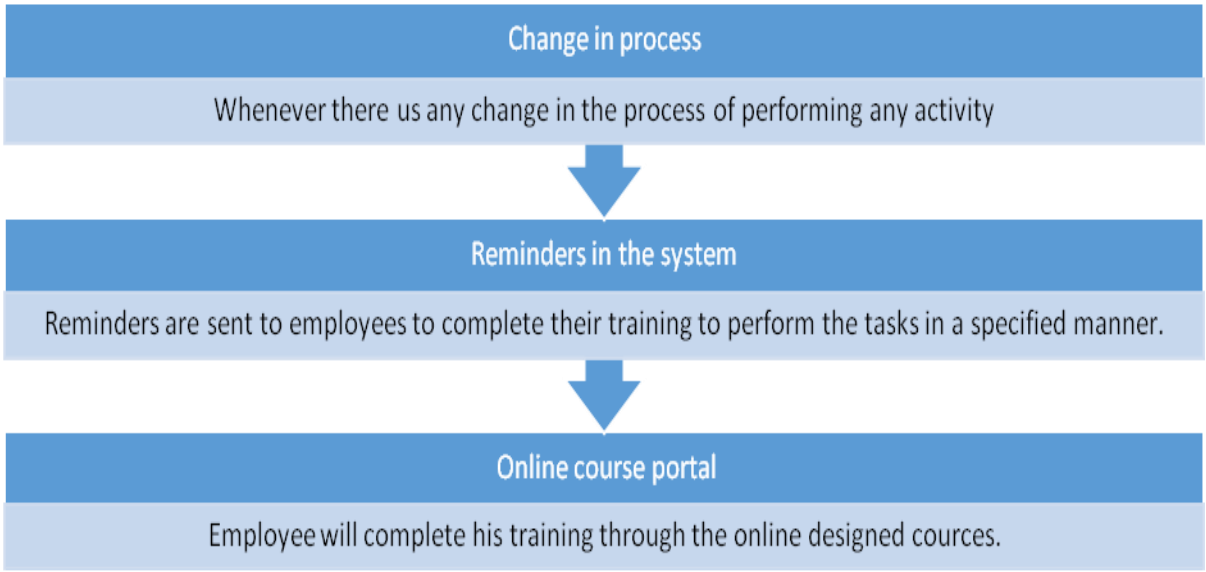

Figure 1: implementation process of AI in training and development

2.3 Employee satisfaction:

There are chat bots that are used by the organisations to keep the employees motivated and committed towards work.M/s EY currently uses a model for employee engagement[3]. AI can help in several activities such as sports, festivals, birthday celebrations, short playful trainings, that can be planned throughout the year based on employee preferences and can further be customised regularly in lines with the feedback. In a similar, way we can use this method in handling the grievance redressal and exit process of an employee. Below is a proposed HR model that can help in handling the unsatisfied employee who visits the grievance redressal or exit portalof the organisation as shown here, see Fig. 2 below:

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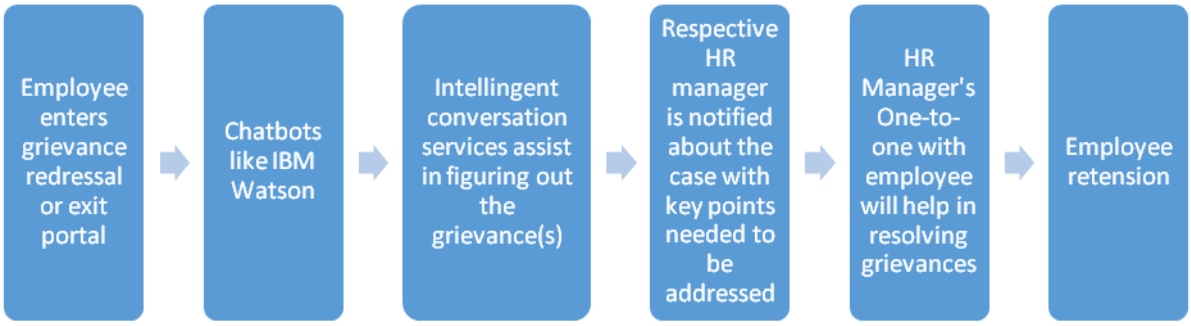

Figure 2: employee grievance redressal model

This can be very much helpful in increasing the employee satisfaction levels and also the retention of employees in an organisation

2.4 HR planning:

AI can be applied to HR planning process. At every stage AI can aid to fasten up the process along with the satisfaction of employees and organisation. In the Fig. 3 below, the process of HR planning is shown where AI can be implemented to smoothen its execution.

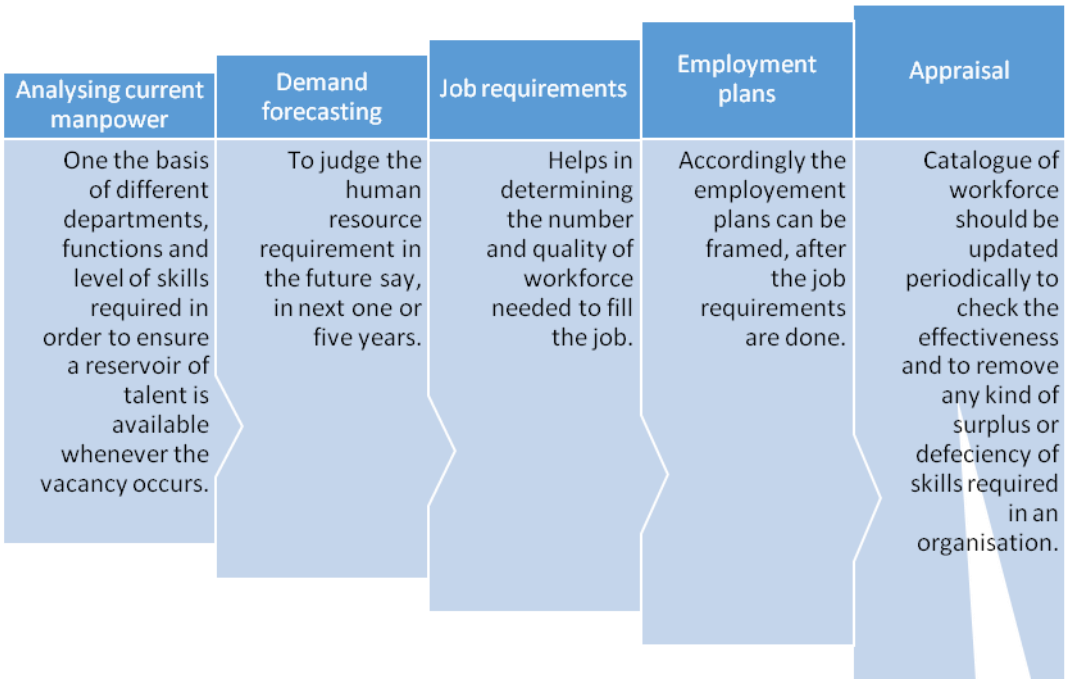

Figure 3: AI in HR planning process

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2.5 Succession Planning:

AI can be used in succession planning as well. Suppose, if any post in a department of a firm got vacant due to any reason like retirement, death, resignation and absenteeism, then the next best replacement of that vacant post can be filled through two processes. Either through external recruitments or internal job transfers. In case of internal transfers, the present employee's one pagers can be scanned an available options within the organisation can be put to consideration. Further, the performance parameters of every employee can be mapped in a central database for monitoring. Then by incorporating smart data analytics into it, employees may be shortlisted for promotional opportunities. This process can be performed by implementing AI as shown below (Fig. 4):

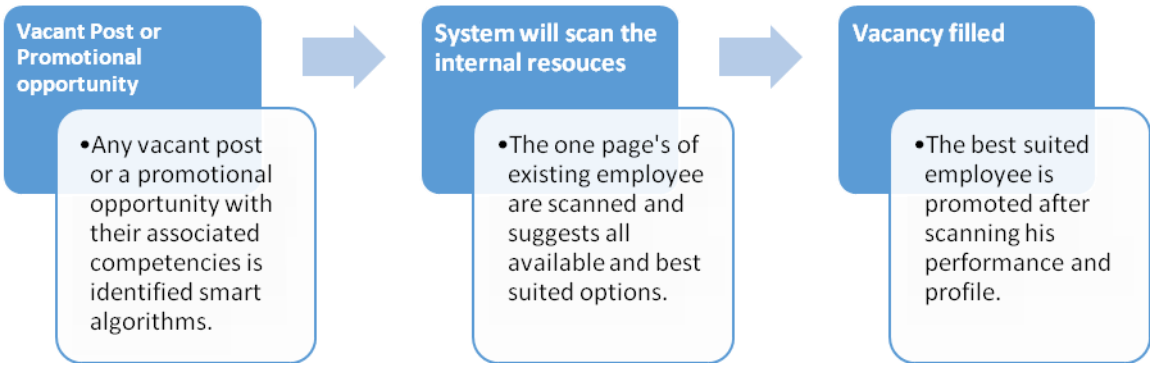

Figure 4: AI implementation model in succession planning

3. Possibilities/Merits:

There are some companies who have implemented AI in their HR functions to ease their operations. Big companies that have opted for AI in HR: Deloitte, Google, IBM, Amazon, EY.

Many organisations worldwide have conducted surveys in order to judge the opinion of the business stakeholders regarding AI implementation. 'World Economic Forum' stated automation will displace 75 million jobs but generate 133 million new ones worldwide by 2022.[4]'McKinsey Global Institute worldwide'stated, with sufficient economic growth, innovation, and investment, there can be enough new job creation to offset the impact of automation, although in some advanced economies additional investments will be needed to reduce the risk of job shortages. In the US, there will be net positive job growth through 2030.[4]

Here is the results of surveys conducted by various organisations worldwide, a survey in 2018 by 'Dun & Bradstreet survey' of 'AI World Conference and Expo' attendees found that 40% percent of respondents' organizations are adding more jobs as a result of deploying AI within their business and only 8% are cutting jobs due to AI implementation.[4]Mining data from more than 50 million job postings, 'ZipRecruiter' found that AI created three times as many jobs as it destroyed in 2018. [4]'Amazon' announced that it will spend $700 million to train about 100,000 workers in the US by 2025, helping them move into more highly skilled jobs. The

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'New York Times' observed that with this program Amazon is acknowledging that "advances in automation technology will handle many tasks now done by people."[4]By way of explaining the more positive take on the future of work,[4] a recent 'Forrester report' (Future of Work) argues that automation is not a singular trend and that future scenarios are influenced by the varying fortunes of a number of trends such as the gig economy, the destruction of industry boundaries, and the increasing desire for privacy and transparency. "You can argue that automation will open the aperture to new, previously unthinkable business opportunities as well as be the necessary engine to execute on business strategy," says Forrester.A global survey 'Allegis' conducted of more than 300 HR professionals at senior-manager level and above. Survey respondents reported having mixed feelings about AI and its impact on the future of work, 21% viewed AI as something to be excited about. 17% considered it both disrupting and enabling, and a lower number, 9%, believed AI will displace most jobs in 10 years.[4]

3.1 Areas of new jobs where AI is auxiliary to human activities/tasks:

3.1.1 Maintenance/ repair of machines:

People who are now getting unemployed can work on their employability skills,such as learning to maintain the automated machines. To learn about how those machines can be repaired so that one can be called whenever there goes something wrong with the vehicle, machines or computers. Further, one could even develop skills of making self-healing programs and algorithms, which could be deployed without any hassle, whenever there's a trouble in normal functioning of certain computing machine.

3.1.2 Preparing new and modifying existing algorithms:

Technically professional people who design AI and algorithms that actually put the machines to work will be the demand of future. The workforce who design such algorithms will generate further scope for the improvements in this area as every innovation will work optimistically for the HR and organisation. New algorithms could be devised having low complexities and higher efficiency.

3.1.3 Commanding and operating

In US people who work as food delivery agents are losing their jobs to drones. The solution here is they should learn how to operate those drones in order to save their jobs. Truck drivers can learn to operate/ control the automated vehicles to save their jobs.

3.1.4 Online Training and development programmes preparation/ Self-paced online training programmes:

Online training programmes will become more reliable as the learners can learn anytime from anywhere and at his own speed. It will open the new opportunities for those who prepare online courses as these training and development programs give scope for employees to learn new skills that will help them with their work in future. The cost of hiring new mentors/ educators for different sets of people will be reduced.

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3.1.5. Innovations in the field of Artificial Intelligence/ opting AI as a career option:

People can opt AI as a career to get the proper career path to walk on. Looking at the current trends of its expansion, multi-fold and diversified job openings would be generated for the upcoming generation of workforce.

3.1.6. Programming /computer based Learning:

As in future almost everything can be done through the computers, future will need more programmers and people with specialised computer knowledge. The jobs will be created in the field of computer and programming.

4. Challenges:

Human resource is struggling with Innovations in technology advancements. Technological unemployment is the matter of concern. According to the current survey,Oxford academics, Carl Benedikt Frey and Michael Osborne, estimated that 47% of American jobs will be at high risk of automation by the year 2030.[4]

4.1 Reasons of challenges:

4.1.1Lack of required skill sets/technical skills:

The workforce lack in proper skill set that is needed and with the outdated skills and knowledge they will not going to succeed in their respective jobs. AI is criticised on this ground that it is replacing human where there is unskilled labour involved. McKinsey Global Institute[4] at the high end of the displacement by automation spectrum are 512 US counties, home to 20.3 million people, where more than 25% of workers could be displaced. The vast majority (around 429 countries) are rural areas in the Americana and distressed Americana segments. In contrast, urban areas with more diversified economies and workers with higher educational attainment, such as Washington, DC, and Durham, NC, might feel somewhat less severe effects from automation just over 20% of their workforces are likely to be displaced.

4.1.2. Lack of awareness and knowledge about AI:

There are people who aren't yet aware of AI properly. The unawareness leads to misconceptions and confusions in the minds of people regarding the implementation/ application of AI in the HR.

4.1.3. Fear of human replacement leading to technical unemployment:

As the technology is growing day by day the fear of technical unemployment is also growing at the same pace. People with non-technical knowledge are losing their jobs. Oxford Economics stated, up to 20 million manufacturing jobs worldwide will be lost to robots by 2030. [4]

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4.1.4. Resistance to change:

Workforce is in a need to change with the changing job patterns and requirements, however it takes time and cost in acquiring such technical skills to cope up with the technology advancements, which is the major challenge and cause of resistance to change.

4.1.5. Growing changes in operations:

In order to make the operations cost effective and efficient, the techniques are changing almost every day. The organisations find it challenging to amend the process very frequently as it makes the process complex to understand.

Conclusion

Jobs are becoming more of operating, technical and 'making others do' kind, instead of getting to work and actually doing it. From the point of view of an employer, he must not resist technology infusion in HR functions for the growth and wealth of the organisation. On the other hand, employees must not complain about the shrinking role and losing jobs but should develop and work on the required skills and knowledge to be at par with the future requirements to be employable. It will be wrong to say AI is killing jobs; we should say AI is transforming the old jobs into new ones instead. We can predict [5] that in future, companies will demand more skilled labour having technical skills and workforce should accept the change optimistically and thrive to make it a multi-ended opportunity.

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