AUTOMATION INVADING HUMAN RESOURCES
DIGITAL TRANSFORMATION AND IMPACT OF AUTOMATION IN THE SPACE OF HR

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*P*URPOSE
INNOVATION, Automation, Artificial Intelligence and Robotics are the new buzz words disrupting organizational processes by making their way into almost every function of the organization and HR is no exception. Automation has entered HR with a drift and aims at bringing a new look to human resources function, which is promising to help reduce time in people related processes and thus, increasing the efficiency & productivity. This paper aims at answering the fundamental question that is bothering HR: Does automation really take away our jobs? Is this the end of human connecting with HR?

Design/Methodology/Approach: the current study involved qualitative conversational methodology derived from the interviewing techniques using a social media platform like LinkedIn. The sample group is the HR professionals from the industry and the data collected with be put through qualitative analysis to derive information from the data.

Findings: The study highlighted that the HR professionals acknowledge the need and usability of technological advancements in the HR domain to not only ease the processes but also to increase the efficiency of the function. The study enlisted the opportunities and challenges of using automation in HR processes and a way forward for organizations to capitalize on the technology.

Research Limitations: The study was more qualitative in nature which can be supported by quantitative findings using case study approach in the future.

Managerial Implications: HR automation is going to be come the new normal for many organizations and it is important that the HR personnel are competent to capitalize on the opportunities and address the challenges.

Originality/Value: Research in the area of automation focused more on the organizational automation as a whole, but very less on HR in specific. The current study attempts to develop the need and benefit of automation from the HR standpoint.

Key Words: Automation, HR Technology, Workplace, Culture, Human connect, HRM.

Introduction

Covid-19 pandemic has disrupted the word around and the business organizations are no different. With complex and forever changing working conditions, has mandated many business organizations to

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look up to technological solutions that can support them to survive and sustain through the pandemic. With organizations world around seeking and/or offering support for the performance and well-being of their employees, automation becomes a most sought after requirement. Chawla et. al., (2020) highlighted the dynamic and complex nature of current working conditions which mandated the organizations to embrace the new-normal of work design so that the productivity loss is minimal. HRs have ventured into understanding and working towards customizing the discretionary work behaviors that have become the new-normal conditions, as highlighted by Chawla et. al., (2020), by effectively using Information and Communication Technology (ICT) (Pan & Zhang, 2020).

The current world is wrapped with great technologies, hi-tech infrastructure which is being supported by the millennials entering the work force. To suit to the millennial the organisations are working to bring in the automation which will aid them realise their potential. Automation will not only increase the workforce efficiency but will also boost the ability of lateral thinking, tactical knowledge and creative skills (Shenton, et. al., 2011). Automation will take away all the monotonous process enabling the path for the future generations. The automation aims at customisation of all the tasks in the organisation also allowing the smooth flow in the entire business (Shivathanu & Pillai, 2018). The human connect in HR will polish the entire Human resource department across the world. As technology continues to transform the world, HR clearly must be part of that change, embracing robotic automation and other technologies that promise greater efficiency (Papageorgiou, 2018). But when we deep dive into the automation the question arises? Are the organisations ready to face this shift in the business environment. Will the culture of the organisation facilitate the change? Is the unconventional trend of automation driving away the humans? Are the bots taking away our job? The scope of this paper targets on the transition phase of the corporates entering into automation. The current article attempts to understand the concept of Automation in Human Resource Department of organizations throwing light on the invasion of HR and its impact on organisation due to the Automation.

Brief Review of Literature

The next-generation automation technologies are disrupting the business organizations and the HR function is expected to be proactive in supporting them through the transformation (Shivakumar,2020; Snadbiller, et. al., 2016; Balsundaram & Venkatagiri, 2020). Currently, HR processes and procedures and are typically semi-automated and manual interventions are time consuming with the increased density of workforce in the competetive environment. challenges including, but not limited to, business processes, data, and technology raising quite a lot of challenges for the human resources personnel. Automation is invading the HR space, sooner or later everything that can be automated, will be automated and the pandemic rushed the transformation like never.

Technology and its Implications on HR

In the world of increasingly advanced technologies where the nature of work changes with great frequency and the companies are shifting their focus on building organisational and employee agility rather than relying on periodic change initiatives, conventional approaches of filling jobs will fade and this will pave way to more systematic, dynamic and decentralised approaches to matching talent to work and work to talent (Bhatnagar, 2008). As work is redefined and talent flows emerge high, new and primary online approach will become a necessary means to ensure that hard and soft skills are kept current.

In this new era employees expect a greater say in shaping the content of their work which has shown considerable impact on organizational performance (Gyan-Baffour, 1999). Companies will find it necessary to cut back on the number of one-size-fits all policies and practices and automation can help. If 'the future of work' is tied to advancements in technology, Artificial Intelligence (AI) will be the key to solving the challenges faced in today's world of work, taking its place at the forefront of evolutions to help human resources professionals work smarter (Oosthuizen, 2019).

HR Automation

HR automation is the process which aims at increasing the efficiency and capability of the HR department by reducing the stress and allowing them to focus on complex tasks (Collier, 1983; Turnage, 1990; Spell, 2001; Lengnick-Hall & Moritz, 2003; Manyika, et. al., 2017). Automation is complementing and not competing the Human Resource Department nor the human resources personnel. With the advanced technology, it is estimated that half of world's work can be automated and little difference can be observed in the efficiency, transforming the fundamental nature of work (Mann, 2020). Automation is directed to help HR departments save time and increase efficiency. It is predicted that HR managers who resist to automate their tasks lose an average of 12 hours in a week which is usually spent on mundane activities (Peterson & Peterson, 1988).

Hence, it may be understood that embracing automation has several benefits to the organizations as a whole and HR function in particular. A further review of the existing literature shows numerous benefits of HR automation.

The Benefits of HR Automation

Through HR automation, organizations can work interdependently with the all the other domains integrate execute the work in an efficient way. Automation if implemented right, can drive excellent results.

1. Improve Efficiency: It is common belief that automation can scale down number of resources and would adversely affect employee's jobs. However, in contrast these human resources can be utilized in other higher value collaborative activities, which can bring smarter provisioning of resources (Lengnick-Hall & Mortiz, 2003; Nawaz & Gomes, 2014)

2. Enhance productivity levels of the employees thereby increasing organisation's success:

Reduce the monotonous and manual labour in the HR Function enabling the workforce to think and invest time in decision making and boost creativity among the employees which gives us the increased productivity of an average employee (Chauhan, Sharma & Tyagi, 2011; Weeks, 2013).

3. Easy Documentation and Fewer Errors: Due to automation the documentation of large data of several employees since years can be done in a smooth and hustle free manner with mere errors (Limoncelli, 2018; Tillman, 2009).

4. Leaner Operations and Lower Costs: Optimum utilization of resources is achieved, the entire operations can be done with low costs, effectively and within no time functions are carried on (Schneider, 2005; Leite & Vieira, 2015).

5. Quality Hiring: Bots are used in organisations to screen the job incumbents and these bots have proven intelligence in quality hiring by mapping the candidate's skill to the job requirements as per the instructions given by the instructor (Gupta, Fenandes & Jain, 2018; Robinson, 2019).

6. Helps Making Strategic Decisions: Real essence of automation lies in understanding and resolving complex decision-making processes, which can be achieved through Heuristic (knowledge based) Automation. Providing thoughtful approach and aids in every HR Function (Kovach, et. al., 2002; Daugherty, et. al., 1993).

7. Time Saving: Automation creates time, time for its employees for their growth as well as to make employees think on organisational development, strategies, position its self-better than competitors and to make the organisation known for its strong culture, governance and be a best place to work (Nawaz & Gomes, 2014). CareerBuilder has attempted to understand the extent to

which the organizations automated the different HR processes in a fully automated, partially automated, or no automation environment. The study highlighted that the highest full automation is found in the Payroll processing and least in onboarding. Whereas partial automation was high in Onboarding &benefits administration, the least being assessment tests. This shows that the organizations are slowly yet steadily moving towards automation in HR yet the implementation is so different between different organizations. Hence, it was important to further understand the benefits of digital transformation more in detail to highlight the impact on organizations.

Research Methodology

A brief review of literature suggested that automation can benefit the organizations in a big way and the benefits can be innumerable. Hence, the current study attempted to work on further to understand the benefits of automation through a detailed review of existing literature. To validate the findings from the review of literature, 30 one-on-one interviews were conducted with HR managers of different organizations to understand any gaps from the corporate that were not addressed in the existing literature. The further sections of the current article illustrate the findings and discussion.

Findings from Literature Analysis

The current section of the article assimilates the information reviewed from the existing literature and the information collected through the one-on-one interviews that were conducted with HR managers of different organizations. The findings of the process followed are discussed and not the process in detail.

Out of the two major automation processes, intelligent and robotic, the later stands to be more mature technology using the software in sync with artificial intelligence and machine learning. A cost-saving and highly efficient activity, HR automation can help in handling the repeatable tasks in one time investment (Nawaz, 2019).

In an experimental study, an organization using a bot to automate the 'release of offer' process has delivered quality results even after drawing data from multiple sources using the compliance and accuracy checks built in the program workflow. This reduced the turnaround time of the 'release of offer' process by a whopping 66% and the cost of four employee is reduced for the organization.

Why HR Analytics?

Organizations can use social media analytics as an effective assessment tool from behavioural perspectives, HR as well as business process to collaboratively build competency framework. Human Resources (HR) analytics refers to assimilation of relevant data from a variety of sources and integrating them into the HR processes for better utility of information assuring the direction towards achieving organizational goals. Basic processes such as payroll, performance appraisals, competency mapping can be made more cost effective and quality efficient through HR analytics. It proved to be a major strategic element for businesses, through predictive and prescriptive analytics helping transform the human resource professional in to a strategic business partner (Marler & Boudrey, 2017).

Robotic Process Automation in Human Resources

A detailed research by Aguirre & Rodriguez (2017) helped understand the automation of business processes using RPA (Robotic Process Automation) which is used as a synonym for different automation related processes which is estimated to handle 60% of process activities in any organization. The study highlighted that the processes activities could include, L&D process execution, employee LTA management, every detail of the employee data, onboarding, time office validation, access creation and termination, employee expense automation etc. These are the processes that the HR professionals tend to spend more time on and which requires the least proficiency to perform.

Artificial Intelligence and its Relevance to HR
According to CareerBuilder 55% of HR Managers say AI will become a regular part of HR by 2024. The disruptive technology of machine learning, natural-language processing, image processing, and automation will have a great impact on revamp processes and transform communications at the workplace. This will strength HR as a function and will empower the HR Professionals.

AI (Artificial Intelligence): With the advancement of technology tasks with normally demand human interference such as visual perception, speech recognition, decision making and translation of languages is now taken over by artificial intelligence. Artificial intelligence is something which is a replica to the human brain and is as competent and better than that of a human brain.

Machine learning: Machine learning is a part of AI facilitates the machines to learn by themselves based on commands and instructions given or by pattern recognition which is still under-utilized. When used in the right sense and the right time frame, machine learning capabilities can improve human decisions by reducing and/or eliminating perceptual errors and biases. Since these can be "conversational solutions", the candidate experience can be multiplied too.

Early Applications of Big Data
Big Data is one such concept that has already become extremely popular in the technology, retail, financial services, internet, marketing, and consumer insights areas and is rapidly expanding into other domains such as HR and by implication OD as well. Big data is a revolutionary and holds transformational possibilities for almost every business. Helps in decision making. Bigdata helps describing the individual level data, linking it to engagement data and managing teams, organisational data by combining internal data with external data sources which helps in organisational development.

A reality that most of the organizations are deploying an HRIS system is a directive to a start of automation in the HR domain with a natural road ahead.

Findings from the interviews used for validation:

As a part of research on Automation in HR, we have conducted a survey targeting the various HR Professionals from the service industry. The survey has 5questions, there are 30 responses recorded from 30 different companies.

The first question goes as "Do you think automation helps HR?"
This question aims at analysing the mindset of the HR professionals understanding towards HR Automation and interpreting their opinion on the automation of various HR Functions. Out of 30 responses 86% of responses were positive and were largely in favour of automation whereas 14% were reluctant and said that automation will not be of any help in the area of Human Resources.

The major areas where automation could be of great help as observed from the conversations are:

- Automation can be implemented in all the HR functions ie from Recruitment to Retirement.
- Automation of HR process helps save time and redundancy of tasks can be avoided.
- Reduction in errors leads to achieve 100% accuracy.
- Allows HR's to engage, build bond, strengthen relations and influence the employees.
- Organisation development can be tracked.
- Forecast future trends in the market.

- Automation helps HR in data base management which is a key to all HR's which helps in data consistency, data retrieval, data analysis, data storage and transfer.

- Better evaluation techniques.

- Quality and standardized HR services through HR shared service model is a great example of Automation in HR.

- Reducing the touch points will certainly reduce the operational work of the associates and help them invest the same time more productively.

This revealed that the organizations would definitely benefit from automation, identified both from literature and the interviews, making them reduce costs at the operational level. Though the organizations might incur the investment cost, but the benefit might surpass the cost in long term making the organization be more sustainable financially.

Can HR processes be improved through automation? Can you cite any examples from your experience?
Through this question it was attempted to understand which processes can be improved through automation and the interviews picked up diverse areas. 38% of responses told that automation can be implemented in all HR functions. 23% responded that by chatbots entering the workforce, HRs will be able to survive through more vital tasks rather than process clarification making the entire job has turn easy. 18% of the interviewees shared that it is of great help in database management, Performance measurement, and in the building up the training dashboards. 10% opined that it reduces errors.

Is the human connect in HR diminishing due to automation?
One of the major discussion points in the world around is the loss of human connect within in the organization and when the interviewees were asked, 77% of them opined the same. However, they also highlighted that the positives of automation surpass the negatives making it more important to be chosen. The participants believed automation increases the human connect with the organization as the "biased decision making" can be considerably reduced with the existence of AI which is one of the most pressing factors for employees. It was also highlighted that there might be enough resistance to change, especially for automation, but with the redundant activities are taken over and when the time lag between the query and response is reduced, the overall satisfaction of the employees in the organization is bound to increase.

However, the participants also opined that there are always certain activities in an organization that cannot be driven without human intervention. The collective cognitive ability of the individuals is much superior than the system, and when streamlined in the right direction along with the right resources, there can be a continuous quality improvement. Also, characteristics such as emotions, empathy and processes such as coaching, mentoring, counselling etc. Can never be taken forward by the technological interventions as effectively as human driven interventions. The participants underlined that with automation taking up mundane and redundant activities, the human resource personnel can handle these processes better, turning them more transformational roles than mere transactional roles.

If automation is expected to save time, how do you think HR professionals should utilize it?
HR's were excited and are ready to welcome AI in their daily life. Through this question we have identified the areas in which they are planning to spend their time on. The activities that the human resource professionals were intending to spend the leftover time are employee engagement, liaison role, compliance, grievance resolution etc. They intend to spend more focussed time and

effort towards identifying training needs to get the workforce ready for future needs. HRs are looking forward to investing on overall organizational development by increasing business acumen, creativity and channelize their efforts towards career progression.

Conclusion and Way Forward

With the exponential increase in technological advancements and constantly demanding workplaces, it is pertinent to design organizations that can embrace and integrate both. The article provides an insight into how such a digital transformation can impact and support the human resources function to improve the effectiveness of the organization. This leads us to the most important aspect of the future workforce which needs to be competent for the challenges ahead. It is vital to be upgrading oneself with new technology, but equally important is to learn to be empathetic with a right emotional quotient. Automation is invading the HR space, sooner or later everything that can be automated, will be automated and the pandemic rushed the transformation like never.

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