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CHALLENGES OF TALENT RETENTION AND THE ROLE OF ROBOTIC PROCESS AUTOMATION IN THE COVID-19 ERA: AN ANALYSIS OF ORGANIZATIONAL STRATEGIES AND EFFICIENCY ENHANCEMENT

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ABSTRACT

Objective: The objective of this paper is to investigate the challenges of talent retention within organizations during the COVID-19 pandemic, propose effective solutions, and highlight the significance of Robotic Process Automation (RPA) in addressing the issue of Non-Utilized Talent, a key facet of waste within the Lean framework.

Method: To achieve this objective, an in-depth analysis of the contemporary organizational landscape was conducted. This analysis included the examination of trends in talent management, the impact of global integration on hiring and development practices, and the role of technology in reshaping human connections. Furthermore, a study of cultural shifts and technological adaptation during the pandemic was undertaken to provide contextual insights.

Results: The investigation revealed that as robots increasingly supplant human labor, organizations are compelled to carefully select and nurture their human resources. Amid the COVID-19 pandemic, unique challenges emerged, influencing talent retention strategies. The paper identifies these challenges and presents a range of innovative solutions tailored to the current circumstances. Moreover, the integration of Robotic Process Automation (RPA) was found to play a crucial role in optimizing resource allocation and mitigating Non-Utilized Talent, thereby fostering operational efficiency.

Conclusions: Considering the findings, this paper underscores the indispensability of strategic talent retention in the face of evolving work dynamics. The interplay of technology and humanism in the virtual realm emerged as a driving force in fostering genuine connections, both within and outside organizational boundaries. By embracing tailored solutions and harnessing the potential of RPA, organizations can navigate the complex landscape of talent retention and resource optimization. This study contributes to the discourse on contemporary talent management, offering insights that can guide organizations toward resilience, efficiency, and success in an era of profound transformation.

Keywords: Talent management, Post- Pandemic era, Artificial intelligence (AI), Machine Learning (ML), Virtual-world, HR Strategy, Robotic Process Automation.

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Introduction

Employees, the brilliant workforce of organisations, left their workplaces as the Covid-19 spread, changes came in the operations of the organisations and their workforces bringing various challenges like remote workplace technologies to employees, secure and resilient connectivity to organisational digital infrastructure, training and competency development of the workforce, and efficient performance management system. Now there is a need to reinvent talent management strategies for the workplace of the future, a need to inculcate Artificial intelligence mechanisms like finding potential candidates via machine learning, hiring them without human interview process, automatic annual performance reviews, algorithm predicting which employees are likely to leave the company soon and a chatbot responding to queries like an HR generalist. Thus there is a need for effective talent acquisition system too so that talent can be managed easily which is a "key predictor of organizational effectiveness (Phillips-Wren et al., 2016; Allen et al., 2007 as cited in Pillai and Sivathanu,2020, pg. 2601). The rise of the Internet and modern technologies are making it easier for potential job seekers to reach HR managers, which has boosted competition for hiring talent.

Objectives of the Study:

- To understand the need of talent management after the pandemic era.
- To understand various challenges posed by pandemic in managing talent
- To discuss the role of artificial intelligence in the form of RPA in managing talent

Research Methodology:

Multiple journals, books, and periodicals were consulted to find the secondary datathat was utilized in the present study. The paper's focus is on various challenges posed by pandemic for talent management and how modern technologies can propose different solutions to it.

Review of Literature:

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The recent global health crisis has taught us varied lessons, and one of the major issues confronting us was managing the recent talent pool. According to Huang et al. (2002), talent acquisition is a key responsibility of HR managers, and businesses are having difficulty finding the right personnel. "There is [always] a shortage of specialized







human resources, and, therefore, there is a need for talent management" (Brunila & Yllner, 2013, as cited in Wadhwa, S. et al., 2022 p.52). If we talk of modern technologies like Artificial intelligence (AI), machine learning, cloud computing, deep learning and, robotization, they all can be favorable and on the same time, can give terrifying results also when used in the workplace in general and talent management in particular (Joerres, 2016). For Technology, it is very easy to replace some of the jobs not requiring unusual skills and are repetitive and regular in nature. "It is [infact] estimated that 60% of all occupations have at least 30% of activities that are technically automatable" (Chui et al., 2015 as cited in Claus, L., 2019, p. 209). For the tasks that require the use of AI, any employer would be interested to choose technology instead of human labor as the work would be completed efficiently and effectively. Lot of other advantages like no tantrums, no facilities to be provided, non- stop 365 days' work per year, no biasness, process to be understood easily and, last but not the least, considerable investment in recruiting, selecting, and training of recently hired talent. No doubt, with these advantages, there can be some limitations like some tasks necessitate empathy, creativity, planning, and "cross-domain" thinking, complete automation of those tasks is not anticipated to occur in the near future (Kai-Fu-Lee, 2017).

Additionally, it is not possible for technology to replace every human being as Technology cannot convey ideas and demonstrate leadership. The ability to comprehend another person's emotions is inherent in humans. Any technology imperfection can be made up for by human intelligence only. To be more specific, (AI) solutions for talent management has the potential to aid businesses in finding better job candidates more quickly, offering more effective staff growth, and boosting employee retention through more efficient engagement but it presents a special set of difficulties that demand careful consideration. Algorithm aversion is one of the challenges where people have the tendency not to trust and accept decisions made by AI but after getting assistance in learning how to use AI tools, they can also interpret and suggest algorithms with confidence.

Challenges and Solutions:

 A talent management expert should not only have the fundamental understanding of various disciplines like HR management, psychology, economics, statistics, law and other humanities, but also about various technology processes in order







to communicate with the technology professionals-talent pool of the organization.

- Since talent management professionals will be working with automatization, machine learning, and AI products, there will be requirement of updated professional competency in these modern technologies for effective decisions.
- 3) As a part of their job, they will have to do competency assessments of candidates, build rigorous training and development programs, performance management and career development. Thus, for these high-tech solutions, they need to have knowledge advancements. The ability of AI and analytics offers the support required for talent competency mapping.
- 4) The talent professionals are using outdated, ineffective traditional methods for recruiting, training and retaining talent. So, the infrastructure, tools, and other parts of the talent management system have to be updated.
- 5) Predictive HR analytics, or big data analysis, is becoming more and more prevalentin contemporary management practices, including HR management in particular. Routing reporting was replaced by predictive analytics, which shifted the emphasis fr on "'Why did it happen?' to 'What will happen next?'"(E. A. Panova et al., 2022, pg. 292). Along with the aforementioned skills, today's modern Talent Management Professionals have to be smart in inculcating the ideas of virtual reality, machine learning, fuzzy logic, neural networks, deep learning, etc. in the context of the modern IT environment.
- 6) A TMP-Talent Management Professional (E. A. Panova et al., 2022, pg. 291) should also understand the importance of Diversity which is the highest kind of empathy in an organisation. If he is successful in dealing with this challenge, this can create wonders since it implies respect for and openness to one another's points of view. It can help in altering employee's behaviours thus managing them easily.
- 7) Creating a culture of respect, for which a transformational leader is required. A robust culture of justice and mutual trust in interactions with employees can only be established via transformational leadership. Even in a world when everything is virtual, these leaders can transform the organizational culture by creating a bond between the employees, thus having such great emotional ties increasing the chances of managing them.





Above all, we may become hi-tech, but, even the most advanced AI tools cannot guarantee a good decision regarding talent acquisition and management. So, there is a need to make abalance between using AI tools for some respite in handling the work and giving respect to the "human brain" which is one of the most supreme gift given by god.

Robotic Process Automation (RPA) to reduce Non-Utilized Talent- the eighth waste of Lean: The most significant foundation for growth in organizations is thought to be the human resource. Organizations have the view that their workforce is their greatest asset. (Wadhwa, S.; Wadhwa, K, 2022). We need to focus on the best utilization of talent especially when we are facing new difficulties for worker-machine interaction. "Non-Utilized Talent waste refers to the underutilization of people's talent, knowledge, skills, and abilities" (Ventura, K. and Özkan Özen, Y.D., 2017 as cited in Gradim, B., & Teixeira, L., 2022, pg. 644) and is considered to be the eight waste of Lean. Overproduction, inventory, motion of people or materials, defects, over-processing, waiting, and transport are the other seven wastes of lean that have been mentioned in the literature. If the employee has more capability which is not utilized in the organization, it is just a waste of Talent. A key component of minimizing the eighth waste of Lean is analyzing the Employee-Job fit, whose benefits cannot be under-estimated. (Kristof-Brown et al., 2005, as cited in Wadhwa, S.; Wadhwa, K, 2022, p.2) RPA is a technique that makes it possibleto automate routine work using robots and is capable of carrying out "sequences of fine- grained interactions with Web and desktop applications" while mimicking human behaviour. They are providing assistance with time-consuming, repetitive, and low-value intellectual work, doing jobs like copying and pasting significant amounts of data from onesystem to another, accessing files, and sending emails thus helping organizations to utilize their talent efficiently and effectively. Organizations also benefit when they implement RPA as it has the capability to work 24 hours, providing qualitative results with almost no errors.

<u>Conclusion, limitation and Scope for future Research</u>: On the one hand, we need smart TMP's-Talent Management Professionals who can handle the modern technologies and on the other hand, the technologies like AI, ML and RPA can be utilized in handling the routine work, giving respite to the "human brain" which can be used for other tasks difficult to handle by machines. With so much innovation, the most crucial component of a business—its human capital—is frequently overlooked. This disregard frequently leads to alack of the capabilities required for Industry 4.0. Organizations must prioritize their





employees by not only preparing them for the digital transition but also giving them more time to focus on jobs that truly require their knowledge thus reducing Non-Utilized Talentthe eighth waste of Lean. In this paper, not much about the RPA tools are discussed posing limitation. Automation anywhere does not support few types of automation, but other solutions can. Therefore, given that the procedures will be automated, it will be crucial to continue researching other RPA tools and their potential applications.

References

Brunila, A., & Baedecke Yllner, E. (2013). Talent Management: Retaining and managing technical specialists in a technical career. Retrieved from http://urn.kb.se/resolve?urn=urn:nbn:se:kth:diva123183.

Claus, L. (2019). HR disruption—Time already to reinvent talent management. BRQ Business Research Quarterly, 22(3), 207-215.

Frankiewicz, B., & Chamorro-Premuzic, T. (2020). The post-pandemic rules of talent management. Harvard Business Review, 1-6.

Gowda, K. (2023). Artificial Intelligence in the Modern Economy: Transformations, Applications, and Future Prospects. Review of Artificial Intelligence in Education, 4(00), e08. Retrieved from <u>https://educationai-review.org/revista/article/view/8</u>

Gradim, B., & Teixeira, L. (2022). Robotic Process Automation as an enabler of Industry 4.0 to eliminate the eighth waste: a study on better usage of human talent. Procedia Computer Science, 204, 643-651.

Huang, G.Z.D., Roy, M.H., Ahmed, Z.U., Heng, J.S.T. and Lim, J.H.M. (2002), "Benchmarking the human capital strategies of MNCs in Singapore", Benchmarking: An International Journal, Vol. 9 No. 4, pp. 357-373.

H. Uygun And R. Gujrati, "Role of Artificial Intelligence & Machine Learning in Social Media," International Journal of Mechanical Engineering , vol.7, no.5, pp.494-498, 2022

Joerres, J., 2016. Globalization, robots, and the future of work: an interview with Jeffrey Joerres. Harvard Bus. Rev. 94 (10), 74---79.

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences OF INDIVIDUALS'FIT at work: A meta-analysis OF person–job, person–organization, person–group, and person–supervisor fit. Personnel psychology, 58(2), 281-342.

Panova, E. A., Oparina, N. N., & Bondareva, L. V. (2022). Talent Management: Tasks and Challenges for a Digital Tomorrow. In Proceedings of the International Scientific Conference "Smart Nations: Global Trends In The Digital Economy" (pp. 288-294). Springer, Cham.









Pillai, Rajasshrie, and Brijesh Sivathanu. 2020. "Adoption of Artificial Intelligence (AI) for Talent Acquisition in IT/ITeS Organizations." Benchmarking: An International Journal 27 (9): 2599–2629.

Tambuskar, S. (2022). Challenges and Benefits of 7 ways Artificial Intelligence in Education Sector. Review of Artificial Intelligence in Education, 3(00), e03. https://doi.org/10.37497/rev.artif.intell.education.v3i00.3

Translated by Content Engine, L. L. C. (2022, Oct 21). Workplace trends: 4 challenges for talent management in 2023. CE Noticias Financieras Retrieved from https://www.proquest.com/wire-feeds/workplace-trends-4-challenges-talent-management/docview/2727434621/se-2

Uygun, H. and Gujrati, R. (2020) 'Digital innovation: changing the face of business', Int. J. Forensic Engineering, Vol. 4, No. 4, pp.332–342.

Wadhwa, S., & Wadhwa, K. (2022). Fitting in organizations: is it crucial for employee management? Academy of Marketing Studies Journal, 26(2), 1-4.

Wadhwa, S., Gujrati, R., & Uygun, H. (2022). Talent Management amidst the Covid-19 Pandemic with the Role of AI in the Health Industry. International Management Review, 18.

Wiradendi Wolor, C. (2020). Implementation talent management to improve organization's performance in Indonesia to fight industrial revolution 4.0. International journal of scientific & technology research.

Zhang, C. (2022). Current Status and Outlook of Higher Education Digital Transformation in China. Review of Artificial Intelligence in Education, 3(00), e02. https://doi.org/10.37497/rev.artif.intell.education.v3i00.2



