

# Impact of HR Analytics for Talent Acquisition in Identifying Quality Resources

Siddharth P. Sharma

Research & Business Analytics – PGDM, S.P. Mandali's Prin. L. N. Welingkar Institute of Management Development and Research, Mumbai, India

Correspondence should be addressed to Siddharth P. Sharma; [siddharthsharma@gmail.com](mailto:siddharthsharma@gmail.com)

Received: 5 February 2024

Revised: 19 February 2024

Accepted: 29 February 2024

Copyright © 2024 Made by Siddharth P. Sharma. This is an open-access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**ABSTRACT**-In a today's modern market scenario and ever-increasing load of Human Resource Management, it is important that prospective of human resources be explored to the best for development of organization. Since, last few decades the systems and procedures of work in Human Resource management have been changing, from operational management systems to strategic one with the help of analytics. One of the noteworthy tasks of authorities of human resource is talent acquisition process, so to bring together the information on HRA for recruitment, done a organized literature review and analysis of information gathered. Total of 63 research studies have been studied and for the present review considered 30 for consequent information investigation. While the outcomes give one hand information on HRA in talent acquisition process and the comparative inventiveness of the field of HRA, with the mainstream of the studies done so far.

**KEY WORDS**-HR Analytics, Types & Benefits, Talent Acquisition, Quality Resources, Decision Making,

## I. INTRODUCTION

It is quite certain that human resource is the most significant part of any organization. The successful growth or unsuccessful of any company is depending on quality of people resource working with organization. In a modest market scenario, it is significant that potential of human resources be explored to the best for growth of organization, as they persist one of the main distinctive features for a company's competitive growth [1]. Although workforces are the essential asset, they are also the most considerable cost. This makes, HR authorities a dominant pillar of companies. Since last several decades, systems of dealing progressions in HR have been changing, from operational management systems to strategic one with the help of analytics [2]. Human Resource Analytics [HRA] is comparatively recent expression which was initially used [3]. HRA can be well-defined as an orderly documentation & quantification of human resource drivers in corporate results through the determination of creating worthier choices [4]. HRA is information technology enabled tool that help in talent acquisition exertions of an organization. With enormous data being created by using several IT applications by organizations and HRA tools make

available the various Human resource aspects for the organization [5]. The 4<sup>th</sup> industrial revolution profoundly altered the system people survive, work, and transmit within them [6]. Although there are several components HR management deal with, recruitment is one of the utmost puzzling and planned processes to professionally recruit quality personnel. Quality recruitment process has substantial influence on organisations financial development and revenue margins. While poor quality recruitment judgements on one hand may lead to low performing employees and on other hand will increase turnover in terms of interviewing and rehiring expenses, training as well as productivity loss, extra hours of other workers, etc. as well as indirectly results, for instance, deprived service to clients or as falling-off in employee confidence [7]. Consequently, refining and revitalising employment processes by hiring the most excellence resources have remarkable impression on organizational presentation [8]. Though, HR influence the organisation performance but in few organisations HR recruitment is supported by a systematic data analysis. In spite tremendous advancement in different organisations throughout the globe and consequently increasing recognition of the importance of HRA, very few organizations are at the present time capable to determine the actual worth that workforces take along to their organisational business [9] HRA tools can be used to find out the major perils in employee recruitment, retention, suitable candidate for a role, compliance risks, employee diversity risks and many other employee related risks. Present paper, gives systematic literature review on HRA for Talent acquisition in identifying quality resources approach, this may give further lead to researchers or organisations to upgrade and to enhance themselves in recruiting / hiring of human resources to precise positions or jobs.

## II. LITERATURE REVIEW

Human resources are establishments supreme strengths and operative way of achieving competitive benefit in a current unpredictable market atmosphere. This becomes a challenge for organizations to select the desired workforce and to cope them with specialised capabilities and measuring their productivities in line with the policy of organisation [10] To recruit or hire the candidate, HR

authorities evaluate the educational background and skills, activities, behaviour, past experiences, etc. Even after doing these practices if candidate is not found suitable for the assigned, it results in poor productivity and cause imbalances in the organisation. HRA follows the measures to develop their upbringing assessment for evaluating the individuality of the appropriate aspirant in the first instance while saving the valuable time as well as liveliness of the company as the employment procedure turn out to be acceptable from end to end holding all the organised metaphors and analytical procedures aimed at prescriptive competencies to be achieved [11]. The way out is suggested by the application of analytics for managing the employee data systematically and sensibly, concerning with organizational outcomes. HRA, comprises the application of statistical procedures, research design and algorithms to assess employee data and interpreting results in suggestive publications [12]. Now a days, it is understood that numerous sources of collecting employment data, for instance, digital media, recruitment web pages, data bases/datasets, etc., and are being considered to extract information on quality resources. This practice has increased but managing the same with unproductive tools have turn out to be a challenge for the HR authorities. Major issue with this is the lack of knowledge and difficulty in using HRA as IT keep on changing and upgrading every day, so it is very important to cope up with the HRA. During recent years organisations have increased attention on human resource analytics and is assisting HR management to be more useful business partners. HRA to a greater extent is of aptitude analytics and business analytics rather only the widespread purposes of HR management [13]. HRA gathers information through the organization from various parts of the business. At the outset, the information be inherent in HR information systems and encompass employee details, for instance, name, age, gender, address, background, profession, seniority, tenure, matrimonial, and family status, worker's work, salary slabs, and promotion background, training the past including certificates. Along with information for analysis, the following can be found in a work force system, employee planning software, recruiting tools or applicant pursuing systems and employee engagement considerations. HRA also includes non-HR statistics which come from the management information system used in the enterprise. Such as, the information can be considered from the finance module; revenue; cost; profit; the marketing module, customer satisfaction and retaining and from the production module, volume, defect rates, returned goods [14]. Importance of HRA in recruitment process and talent management which can improve the performance of an organisation is not much dealt in literature. Through the last decade, the collected works on HRA are increased speedily. However, conceptual research papers which suggest typologies to classify various HRA performs and areas of applications are very few [15,16,17]. In addition to this, review articles, such as [3,18,19,20] dominate this promising literature. Likewise, case studies, those focus on the concerns of HRA practices are done [21,22]. Big data analytics technologies can be functioned as major contribution for human decisions or to reinforce whole independent judgments. Questioning, reporting, online analytical processing and indicators are examples of business intelligence [23].

Consequently, empirical research in the area of HRA is yet limited & that's why thorough quantitative as well as qualitative research analysing the concerns of HRA is required. In total, the works on HRA is yet in its early stages [2,3,24,25,26]] and literature like this creates a platform for HRA which could help organisations flourish.

### III. OBJECTIVES

- To study existing recent state of HRA.
- To study understand Human Resource Analytics its impact on Analytics on Talent Acquisition.

### IV. RESEARCH METHODOLOGY

The data incorporated in the paper is collected from various sources like journals, conference proceeding, reports, etc. Secondary data gathered to analyse the HRA in creation of value-added recruitment judgments for current and foreseeing the forthcoming requirement of workforce in the organization and its significance in decision making. Research papers are further categorised as primary research, secondary research, conceptual research and in case of secondary research if, 'review' word is used in title of paper are considered as review article. Information Source, Sample size (wherever applicable), Design/ Methodology/ Approach, Results/findings/ observations and Key Aspects of research have been provided as mentioned in publications.

#### • *Inclusion Criteria*

Research papers / relevant studies/ reports published on the HRA with inclusion or focus or mention of talent acquisition through HRA have been included.

#### • *Exclusion Criteria*

Studies with only marginal reference to HRA, studies do not include talent acquisition or recruitment using HRA.

Table 1 present the literature review studied results/findings of research on HRA to achieve the objectives mentioned. While studying the literature on HRA in general and

use of analytics in recruitment process in particular, despite indications of a growing attention in analytics and AI, very little scientific evidences use of HRA.

Table 1: Data Analysis and Interpretations

Author/s & Reference	Type	Information Source	Sample size	Design/ Methodology/ Approach	Results / findings / observations	Key Aspects
P.V.S. Kiran <i>et. al.</i> , 2023, [24]	Primary as well as Secondary research	Questionnaire & Published papers	300 respondents	Data collection, statistical analysis, & interpretation	The consequences show that R value is 0.827 which designates that there is (82.7%) association between HRA & Organizational Performance	HR analytics, human capital management, HR functions. organizational performing
Tiwari & Nigam, 2023, [27]	Secondary research	Published papers (2010 to 2023)	-	Data collection, analysis & interpretation	HRA facilitates to recognize the causes that contribute to employee throughput and acquire strategies to retain top talent	HRA benefits, limitations & challenges
Cho Wonhyuk <i>et. al.</i> , 2023, [28]	Conceptual study - Secondary Research	Published papers	--	Observations & interpretation	Discussed HRA, comprising data organization, work force abilities, acceptance, & the challenges of privacy, reliability, algorithmic bias & publicness.	Studied perceptions & performs of HRA, projected a five step process (define; collect; analyse; share and reflect) to support HRM using HRA.
Ameer Rimsha <i>et. al.</i> , 2023, [29]	Primary research	Questionnaire	180 employs of HR	Data collection, statistical analysis, & Interpretation. Mediation analysis using Hayes & Preacher process method	The straight outcomes found that HRA proficiencies owned by HR specialists have an influence on the decision-making & benefit on investments made by the business.	Focused - HRA, performance, motivation, data explanation skills, data presentation skills, policymaking, return on investment
Deeba and Wadera, 2022, [30]	Primary as well as secondary research	Questionnaire & published literature	211 HR Professionals	Data collection, analysis & interpretation	There is important variance in the use of analytics in minimising time of sourcing talent among various brand of hotels.	HRA in recruitment in hospitality industry. HR executives have responded queries with full consideration leading to some untrustworthy data.
Lisa Marie Giermindl <i>et. al.</i> , 2022, [31]	Secondary research	Published papers	-	Data collection, analysis & interpretation	Revealing the fundamental assumptions of HR analytics by offering & illustrating 6 perils & discussed their consequences for industries and employees.	Contributes to data research in connection of analytics, AI, & human algorithmic management
Thorat & Jagtap, 2022, [25]	Primary research	Questionnaire	100 respondents	Data collection, statistical analysis & interpretation	Analysed forms of interview, approach of candidate, stages during recruitment, sources to track candidate, different recruitment process, etc	HRA, statistical and analytical techniques, such as tabulation, percentage, and ranking approach, to analyse the data.
Agarwal & John, 2022, [32]	Primary research	Questionnaire using google form	50	Data collection, statistical analysis & interpretation	Influence on the acceptance inclination of individuals for HRA is proved & 6 among the 7 factors which were reflected as have	Studied acceptance & Impact of HRA amidst HR experts in Indian IT & ITES industries

					an impact on matter.	
Kale <i>et. al.</i> , 2022 [33]	Secondary Research	Database	5 organisations	Data collection, statistical analysis & interpretation	Elaborated how HRA help to comprehend behaviour, turnover & retention of employees.	Use and benefits of HRA in 5 different organisations
Sharma <i>et. al.</i> , 2022, [15]	Conceptual study - Secondary Research	Published papers	-	Observations & interpretation	HRA contribute to the whole organization, due to excellent vertical and horizontal alignment using the big data methodology	Studied different types and aspects of HRA, software used and challenges.
Annepu & Sowdamini, 2022, [34]	Secondary research	Published papers	-	Data collection, analysis, & interpretation	Focused on employer turnover analysis & workforce supply chain optimisation, decision maker, & other tasks using HRA.	HRA & evaluation procedure
M. Alessandro, 2022, [35]	Secondary Research	Published papers	-	Observations & interpretation	Paper contributes to growing discussion on HRA as it is emerging field	Isolated 106 concepts of HRA divided in 3 main & 6 sub categories
F. J. Alvarez-Gutierrez <i>et. al.</i> , 2022, [18]	Review article	Published papers (34)	-	Data collection, statistical analysis, & interpretation	By means of HRA 40% articles focus on skill prediction, while on predicting the accomplishment of the application 20%, on predicting future functioning 20%, & on talent flow in the form of job transitions 20%	Paper addressed the significance of recent HRA works, and determined that though this area is captivating ever increasing attention, the main focus of HRA remains economic benefit.
Nagpal, <i>et. al.</i> 2022, [26]	Primary research	Questionnaire using google form	30	Data collection, statistical analysis, & interpretation	Studied that analytics gives actionable perceptions into user's behaviour, assist in reducing costs, driving revenue, & providing a a good experience that makes people stay.	Survey related to HR practice by google form and its study and analysis
Prasad & Kamalakhanan, 2021, [36]	Secondary Research	Published papers		Data collection, analysis, observations & interpretation	With the application of HRA in employment procedure, organisation can safeguard its success	An Overview of HRA, its benefits & the factors that affect its implementation are studied in this paper.
Thiyagarajan, 2021, [17]	Conceptual study - Secondary Research	Published papers	-	Provided model for predictive analytics in recruitment	Focus on targeted recruitment during pandemic & the role of recruitment using analytics and metric	To extend competence for gravity in analysis, the use of analytics may be a key aspect.
Karmanska, 2020, [2]	Primary research	Questionnaire.	44 HR employees	Data collection, quantitative analysis & interpretation	HRA increases the efficiency of recruitment, dropping recruitment expenditures (in total 88.6% positive responses).	Small-scale organizations may not have high attribute data or analytical capabilities.
Dana <i>et. al.</i> , 2020, [7]	Secondary research	Dataset	Around 7 lakh employment cases, recruited over the span of 2000–2010	Data collection, quantitative analysis, observation & interpretation	For interpretability determinations, propose picking the VOBN model, while for exclusively pointing at prediction, advise using the GBM model	Examination of present recruitment strategies & the extraction of explainable and actionable pattern-based perceptions.
S. Berhil <i>et. al.</i> , 2020, [19]	Review article	Published Papers (2008 to 2018)	-	Data collection, statistical analysis & interpretation	The most utilised AI algorithm is Decision Tree- 30%, SVM - 17%, & Random Forest - 15%, for Logistic Regression - 11% for KNN - 4%, MPL & C- 4.5% & the less used are Naive Bayes with - 2%	AI / IT and issues related to HR
P.J., Opatha 2020, [16]	Conceptual study - Secondary	Published papers	-	Data collection, analysis & introduced a new model of	Provides arithmetic facts & confirmations, can be used in the process of making new	Focused on business perceptive, data assembling & excavating skills;

	Research			HRA with an example.	HR decisions throughout the execution of existing HR policies	analytical skills; communication as well as presentation skills.
Bhalerao & Patil, 2019, [5]	Secondary research	Published papers	-	Data collection, quantitative analysis & interpretation	HRA for generating precise and actual time information.	HRA, talent acquisition, Statistics
A. Q. Mohammed, 2019, [10]	Secondary research	Published papers	-	Data collection, quantitative analysis & interpretation	The study focus is on exploring on the prospect of HRA. Proposed HRA and Predictive Decision-making model	HRA, predictive model, information explores the range of possibilities that HRA
Varma & Chavan, 2019, [37]	Secondary research	Published papers	-	Data collection, analysis, & Interpretation	As per the data available a conceptual outline was developed establish the relationship between the employee turnover & the details available so as to draw meaningful analytics.	Emphasis given on the correlation of different process of HR in different departments of Industries
P. M. Mahida, 2019, [38]	Secondary research	Published papers	-	Data collection, analysis & interpretation	Provided benefits of HRA and issues concerned to this	HRA, Decision making, Predictive Analysis
Manchanda & Gulati, 2018, [39]	Secondary research	Published papers & online database	-	Data collection, analysis & interpretation	Study recommends that there is a affirmative impact of using HRA at workplace. Traditional tools & analytical tools were discussed.	Paper illustrates the HRA practices which have been in practice by the various organizations
A.Lochab, <i>et. al.</i> , 2018, [20]	Review article	Published papers	-	Data collection, statistical analysis, using R-software & Interpretation	Use of HRA, its consistency is discussed with table & graphs. analysis of select literature shown that studies have done on analytics but there is a disparity in HRA which can be investigated & studied in future researches	Analysis show how frequently HRA is aimed at improving the performance of an industries.
Owais Ahmed, 2018, [40]	Secondary research	Published papers	-	Data collection, analysis, & Interpretation	Qualitative study on AI covering various aspects of HR process	Includes different AI tools and techniques in recruitment, their benefits & implications
Janet & Boudreau, 2017, [3]	Review article	Published papers (14) appeared on Journal Quality List	-	Integrative synthesis procedure	Emphasis on What is HRA, How and why does it works outcomes of the same.	Articles selected which addressed one/ more of the five questions Targeted RA
O.F. Masese, 2017, [41]	Secondary research	Published papers (32)	-	Data collection, quantitative analysis & interpretation	Provided a framework through perceptions of HR Analytics in HR system, recruitment	Focus on workforce Analytics, its benefits in Recruitment decisions for HR department.
In Lee, 2011, [8]	Secondary research	Published papers	-	Utilised technique of Lagrange multipliers to locate ideal investment in a budget for analysis & interpretation	E - recruitment increases the recruiters adeptness to handle job applications and postings by reducing paperwork & systematising key recruiting activities	HRA, e-recruitment process

Total 30 research papers considered for current study which are focused on HRA and with reference to talent acquisition. Among these, 17% based on primary research either surveys or case studies, 50% papers based on secondary research,

13% are review articles based on secondary research, 13% are conceptual studies, while 7% papers include primary as well as secondary studies. (Fig.: 1)

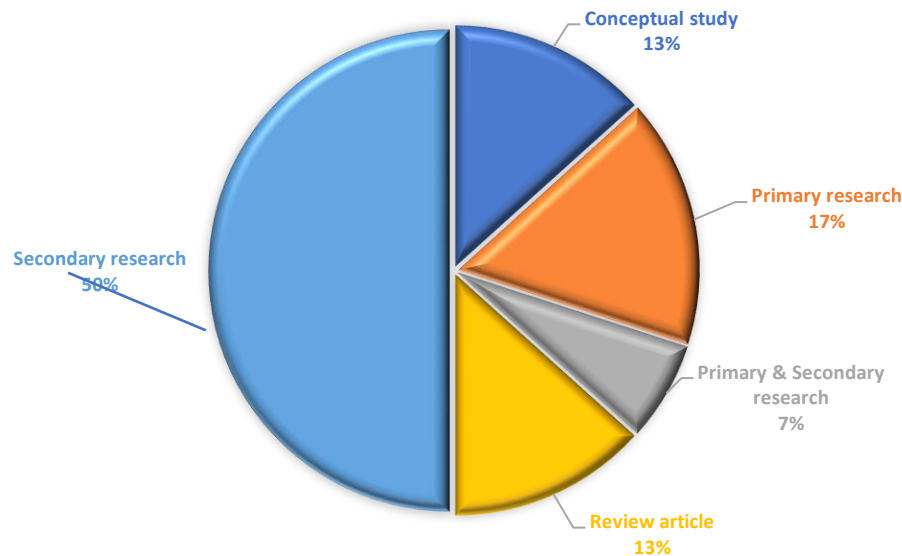


Figure 1: Research Papers of Different Categories

Primary research papers either have been done through questionnaire or surveys. While secondary research including review article are based on the information obtained from database or published literature on HRA. Some notable examples of primary research such as surveys using google forms / questionnaire / interviews, [32]. Significance of the acceptance tendency of individuals towards HRA is demonstrated & 6 out of the 7 issues that were measured do have an impact on the matter [42]. Worked on use of perspective analysis in recruitment. [29]. The straight consequences found that HRA capabilities possessed by HR professionals have an influence on the decision making & return on investments made by the business [2]. HRA increases the efficiency of recruitment, minimising recruitment budgets (in total 88.6% positive responses). Conceptual studies on HRA have been done by, Cho Wonhyuk, studied concepts & practices of HRA, proposed a 5-step process such as, to define, collect, analyse, share, and reflect, to assist HRM [28]. Sharma et. al. 2022 and Optha, 2020 proposed different types and aspects of HRA, software used and challenges [15,16]. While Thiagarajan gave emphasis on targeted recruitment & the role of recruitment using analytics and metric [17]. Nagpal Tanya, et. al 2022 studied that analytics deliver significant perceptions into user's performance, help in dropping costs, pouring revenue & providing a one of the respectable experiences that makes people work with [26]. Thorat & Jagtap, 2022, analysed forms of interview, approach of candidate, stages during recruitment, sources to track candidate, different recruitment process, etc. [25]. While there are some examples of studies based on primary research such as, surveys, case studies also included data from secondary sources. e. g. P.V.S Kinran et.al. [24]. The findings demonstrate that, R value is 0.827 which designates that there is (82.7%) association amid HRA and

organizational performance. Deeba and Wadera, studied HRA in recruitment in hospitality industry [30]. Some worth mentioning review articles and their interpretations on HRA are F.J. Alvarez-Gutierrez et.al. [18]. Using HRA 40% articles emphasis on skill prediction and detection, while on predicting the accomplishment of the application - 20%, on predicting future performance - 20% & on talent movement in job transitions - 20% [3]. Emphasis on What is HRA, How and why does it works outcomes of the same [20] Use of HRA, its consistency is discussed with table and graphs. scrutiny of literature discovered that works are done on analytics but still there is a gap in HRA which can be investigated & studied further [19]. The utmost used AI algorithm is Decision Tree: 30%, SVM: 17%, & Random Forest: 15%, for Logistic Regression: 11% for KNN: 4% MPL & C: 4.5% & the less used is Naive Bayes with 2%. In addition to this some research articles focused on HRA by providing different models, frameworks / concepts, etc. such as, [7,10,35,41]. While several other papers reveal different aspects of HRA, viz., HRA definitions, types, different tools used, benefits, challenges and implications etc. [5,8,27,31,33,34,36,37,38,39,40,43].

## V. CONCLUSION

Present study suggests that Human Resource authorities need to become ever extreme data savvy and must develop improved analytical capabilities in line to perform better and contribute his/or best for the organisation. Furthermore, talent prediction assists in goal-directed hiring thus to predict the appropriate employee for the job to be assigned. Parallely, organisation need to upgrade the IT infrastructure required for HRA / AI, so as to fulfil the requirements for better outcome using HRA. This suggestion IS for a transformed method could be applied using appropriate

technological interventions. As far as, use of HRA in talent acquisition is concerned, there is a need of some more detailed studies to give further directions for the use of analytics.

## VI. IMPLICATIONS

Use of analytics in HR for talent acquisition will spread a comprehensive proliferation in data- approachability in HR sections of organizations and will help to the implementation of a progressively data driven attitude for almost all the processes. Similarly, it will enhance competency HR professionals. Some studies done earlier which have given better insight towards HRA have been discussed in this review, and will reassure HR professionals as well as researchers for further tasks in the field.

## ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude to Dr. Chitralkha Kumar for providing me with this great opportunity and guiding me along the way.

## REFERENCES

- [1] Vineeta and A Bharti., "Human resource analytics," South Asian Journal of Marketing & Management Research, 7(5), 2017, pp 68-77.
- [2] Karmanska, "The benefits of HR analytics," "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu." 2020, 64(8).
- [3] H. J. Janet & J. W. Boudreau. "An evidence-based review of HR analytics," The International Journal of Human Resource Management, 28:1, 2017, pp. 3-26,
- [4] S. van D., Heuvel and T. Bondarouk, "The rise (and fall?) of HR analytics: a study into the future application, value, structure, and system support", Journal of Organizational Effectiveness, People and Performance, Vol. 4 Issue: 2, 2017, pp.127-148.
- [5] K. Bhalerao and V. Patil, "Role of HR analytics for talent acquisition," JETIR, Volume 6, Issue 5, May 2019, pp. 114-115.
- [6] K. Schwab, "The fourth industrial revolution, what it means and how to respond," Foreign Affairs, 2016. (12). World Economic Forum, 91–93 route de la CapiteCH-1223 Cologny/Geneva, Switzerland, ISBN-13: 978-1-944835-01-9
- [7] P. Dana, G. Singer, D. Avrahami, H. C. Ben-Gal, E. Shmueli and I. Ben-Gal. "Employees recruitment: A prescriptive analytics approach via machine learning and mathematical programming," Decision Support Systems. 134. 2020. 113290. <https://doi.org/10.1016/j.dss.2020.113290>.
- [8] In Lee, "Modeling the benefit of e-recruiting process integration," Decis. Support. Syst. 2011. 51 pp. 230–239.
- [9] J. W. Boudreau, and P. M. Ramstad, "Talentship and human resource measurement and analysis: from ROI to strategic organizational change," Human Resource Planning Journal, 2004. 29.
- [10] A. Q. Mohammed, "HR Analytics: a modern tool in hr for predictive decision making," Journal of Management, 6(3), 2019, pp. 51-63.
- [11] S. Tierney, R. Bivins, & and K, Seers, Compassion in nursing: Solution or stereotype? Nursing Inquiry, Volume 12271, 26(1), 2019, pp. 1-6.
- [12] Levenson, Using targeted analytics to improve talent decisions," People and Strategy, 34(2), 2011, pp 34.
- [13] W. Y. M. Momin, and K. Mishra. "HR analytics as a strategic workforce planning," IJAR, 1(4), 2015, pp. 258-260.
- [14] F. Diez, M. Bussin and V.Lee, "Prelims Fundamentals of HR analytics," Emerald Publishing Limited, Bingley, 2019, pp. i- iv
- [15] P. Sharma, S. Jha and S. Dash, "HR analytics: A conceptual study on decision making," YMER, vol. 21, Issue, 7, 2022, pp. 636-645.
- [16] P. J. Opatha, "HR Analytics: A literature review and new conceptual model," International Journal of Scientific and Research Publications, Volume 10, Issue 6, 2020, pp. 131-140.
- [17] R. Thiyagarajan, "The role of recruitment analytics and metrics in targeted recruitment post pandemic. . ICCAP. 2021, December 07-08, Chennai, India Copyright © 2021 EAI, DOI 10.4108/eai.7-12-2021.2314764
- [18] F. J Alvaez-Gutierrez, D. L., Stone, A. M., Castaño, & A. L. García-Izquierdo, "Human resources analytics: a systematic review from a sustainable management approach," Journal of Work and Organizational Psychology, 38(3), 2022, pp. 129-147.
- [19] S. Berhil, H. Benlahmar and N. Labani. "A review paper on artificial intelligence at the service of human resources management," Indonesian Journal of Electrical Engineering and Computer Science, Vol. 18, No. 1, . 2020. pp. 32-40
- [20] Lochab, S. Kumar and H. Tomar. "Impact of human resource analytics on organizational performance: a review of literature using R-software. International," Journal of Management, Technology And Engineering," Volume 8, Issue X, 2018, pp. 1252-1261.
- [21] W. A. Schiemann, J. H. Seibert and M. H. Blankenship, "Putting human capital analytics to work: Predicting and driving business success. Hum Resource Management. 57, 2018, pp. 795–807.
- [22] ] S. Cristina and E. Ferreira. "Workforce analytics: A case study of scholar–practitioner collaboration. Hum Resource Management. 2017, pp. 1–13.
- [23] M. Nocker and V. Sena. "Big data and human resources management: The rise of talent analytics," S o c. S ci. , vol. 8, no. 10, 2019, pp. 1–19.
- [24] P.V.S. Kiran, S. Sujitha , S. Anisha Estherita and S. Vasantha. "Effect of HR analytics, human capital management on organisational performance," Journal for Educators, Teachers and Trainers, Vol. 14(2), 2023, pp. 117-129.
- [25] T. Thorat and M. Jagtap, "Analytical study of HR recruitment process," International Research Journal of Humanities and Interdisciplinary Studies (IRJHIS). 2022. (special issue). Pp. 197-206. DOI Link: <https://dois.org/doi/10.32581185/IRJHISIC2302025>.
- [26] T. Nagpal, A. K. Jaiswal, B. S. Panchal. "To study the importance of HR analytics practice for SMEs in NCR region," International Journal of Management and Humanities (IJMH)," Volume-8 Issue-9, 2022, pp. 1-14.
- [27] N. Tiwari and S. Nigam. "HR analytics: A new method for contemporary human resource practice," International Journal of Creative Research Thoughts (IJCRT), Volume 11, Issue 8, 2023, pp. 397- 401.
- [28] W. Cho, S. Choi, and H. Choi. "Human resources analytics for public personnel management: concepts, cases, and caveats. Administrative Sciences, 2023, 13: 41. Pp. 1-22.
- [29] R. Ameer, P. Garg and H. Singh, "Impact of HR analytics competencies on organizational performance," Journal of Pharmaceutical Negative Results, Volume 14, Special Issue 2, 2023, pp. 133-140.
- [30] F. Deeba and D. Wadera. "An analytical study on determining role of HR analytics in addressing challenges related to talent acquisition & retention with reference to hospitality industry, International Journal of Mechanical Engineering, 2022, Vol. 7 No. 1, pp. 6193-6210.
- [31] L. M. Giermindl, F. Strich, O. Christ, U. Leicht-Deobald and A. Redzepi, "The dark sides of people analytics: reviewing

the perils for organisations and employees,” European Journal of Information Systems, 31:3, 2021, 410-435.

- [32] H. Agarwal and P. J. John, “Adoption of human resource analytics in information technology and information technology enabled services industry in India,” J Data Sci. Info. Citation Studies. 1 vol.1, 2022, pp. 50-57.
- [33] H. Kale, D. Aher and N. Anute. HR analytics and its impact on organizations performance,” IJRAR, Volume 9, Issue 32, August 2022, pp. 619-630.
- [34] V. V. S. K. Annepu and T. Sowdamini. “Implications of human resource analytics on employee performance in pharma industry in south india-a literary study,” International Journal of Innovative Research in Engineering & Management (IJIREM), Volume-9, Issue-5, 2022, pp. 282-288.
- [35] M. Alessandro. “Human resources analytics: A systematization of research topics and directions for future,” Human Resource Management Review, Vol. 32 Issue 2, 2022, 100795.
- [36] T. K. Prasad and S. K. Kamalakhanan, “Analytics in human resource management and its impact on organizational performance,” International Journal of Research in Management, Volume 3, Issue 2, 2021, pp. 10-12.
- [37] Varma and C. R. Chavan, “A case of hr analytics – to understand effect on employee turnover. JETIR, Volume 6, Issue 6: 2019, pp. 781-787.
- [38] P. M. Mahida, “Human resource analytics: the modern tool in HR for concrete decision making,” International Journal of Research in Social Sciences, Vol. 9 Issue 1, 2019, pp. 2061-2070.
- [39] P. Manchanda and S. Gulati. “HR analytics at work: making powered organisations” Effulgence, Vol. 6 No. 1 (Special Issue 2), 2018, pp. 132-141.
- [40] O. Ahmed, “Artificial intelligence in HR,” IJRAR Volume 5, Issue 4 : December 2018, pp. 971-978.
- [41] O. F. Masese. “Workforce analytics the prospect of human resource management,” IOSR Journal of Business and Management (IOSR-JBM), Volume 19, Issue 11. Ver. V: 2017, pp. 08-13.
- [42] D. Samtani. The advantages of using prescriptive analytics in recruitment and performance management processes by HR professionals based in Ireland. A dissertation submitted in partial fulfilment of MA in Human Resource Management to the National College of Ireland. 2022. Source: <https://norma.ncirl.ie/5911/1/dimpledilipsamtani.pdf>
- [43] S. Prabhakar, R. G. Kurien and S. Jayaprakash. “Research ZENITH International Journal of Multidisciplinary study on human resource analytics: it's tools, applications, and impact on business performance,” Research, Vol.11 (9), 2021, pp. 23-52.

## ABOUT THE AUTHOR



**Siddharth Pramod Sharma** is a Research & Business Analytics in the department of PGDM in S.P. Mandali's Prin. L. N. Welingkar Institute of Management Development and Research, Mumbai, India