

HR ANALYTICS IN REVAMPING HUMAN RESOURCE MANAGEMENT IN 21ST CENTURY

Rajwinder Kaur¹ and Ms. Prerna Dhawan²

ABSTRACT

Dramatic alliances are happening everywhere in the economic sectors right now. There are a stunning number of weights placed on the human resource management structure to allow their organization to navigate through the ongoing changes. These changes include an increase in globalization, rapid technical change, head-to-head competition; powerful alterations, new structures and novel task distribution techniques, and a high level of talented worker aspirations. To be successful in this situation, HR must maintain a high level of standardization and of course, must get the most up-to-date innovations to provide the optimal data to the executives. The backbone of human resource executives is the evaluation of large relevant records which serves as the foundation for critical layers. By developing critical human asset strategies, HR can build a significant important business relationship with the organization, resulting in two significant outcomes: more forceful effectiveness or a genuinely satisfied workforce. This study aims to ascertain managers' or human resource staff's perspectives on the outcomes of analytics application in human resource management, as well as investigate the basic roles of study in facilitating workforce consciously by enabling HR to develop and coordinate progress advancing human resource practices for the organization. The present study endeavors to examine HR analytics in revamping human resource management in the 21st century. Both primary, as well as secondary information, is used to generate results and draw a conclusion.

Keywords: HR Analytics, HR Data, Human Resource Management, Management, Organizations, Workforce.

1. INTRODUCTION

Human Resources have generally been the organization's most valuable asset. Individuals should be viewed as assets to gain a competitive advantage, and firms can accomplish an advantage in the market by integrating human resource functions with fundamental business objectives. Human resources are all at the heart of a company's success (Momin and Mishra, 2016). Organizational performance has improved as a result of new techniques and innovation, and these organizations are growing quickly and successfully. Businesses are rapidly adopting technology and methods that might assist in the retention of HRD, as management of human resources plays a critical role in every firm (Tomar and Gaur, 2020).

The practice of gathering and analyzing Human Resource (HR) systems to optimize an organization's manpower performance is known as HR analytics. Talent analysis, people analytics,

and especially workforce analytics are all terms that might be used to describe the process. HR analytics is concerned with HR function parameters including time to recruit, training cost per employee, & duration to promotion. Every one of these indicators is monitored solely by HR for the benefit of HR. HR study & innovation in the framework of social, behavioral, and organizational science are included in the HR analytics lifecycle, as are a wider array of HR analytics approaches and data sets (Falletta and Combs, 2020).

HR can develop a fantastic planned business arrangement with the corporation by developing effective human resource solutions, which will result in two key outcomes: greater organizational effectiveness and extremely satisfied employees (Verma and Mehrotra, 2017). HR analytics, like a competence, has the potential to secure HR's existence as a strategic management tool while also improving organizational effectiveness (Angrave, Charlwood, Kirkpatrick, Lawrence and Stuart, 2016). HR plays a critical part in executing the business vision. It is feasible to determine how HR contributes to the organization performance by correlating HR effort to outcomes. This approach works not only by confirming existing knowledge and skill but also by providing value to the business choices by understanding how and where

-
1. Research Scholar (University School of Business) Chandigarh University, Gharuan (Mohali) Punjab, India
Email: bimbrarajwinder@gmail.com
 2. Assistant Professor, University School of Business, Chandigarh University, Gharuan (Mohali), Punjab, India

to make critical business decisions that interfere and produce company success (Reddy and Lakshmikeerthi, 2017).

Considering increased business demands for organizational effectiveness HR analytics is becoming increasingly important in today's corporate climate. It allows for better workplace decision-making based on employee insights. HR analytics helps firms tie HR metrics to business objectives. It focuses on attracting people and evaluating future HR requirements while increasing employee productivity and morale (Lakshmi and Pratap, 2016).

The present study is playing a very valuable role in today's changing business environment. It analyzes HR analytics in today's changing competitive world.

2. REVIEW OF LITERATURE

Understanding the role of Human Resource Management in enhancing organizational capabilities through HR Analytics, as well as the degree to which HR Analytics will be utilized and how it will contribute to organizational success, is critical (Varma and Chavan, 2019). HR has always been one of the highly flexible management areas. It is no longer seen as a body whose main purpose is to address employee grievances. It's seen as a crucial control hub that determines the organization's effectiveness (Jain and Jain, 2020). The organization strategy plans are supported by facts & data from the firm. HR analytics continues to bring evidence-based programs, data-driven strategic planning, and improved value added and productivity by prioritizing the effect of HR initiatives (Alsuliman and Elrayah, 2021). Human Resource analytics has proven to be a godsend for HR professionals. In today's difficult economic climate, every company must match its HR approach with its overall business objectives. HR analytics, therefore, assists HR professionals in formulating a strategy that is in line with the organization's overall objectives (Momin and Mishra, 2016). Despite these obstacles, HR analytics have aided firms in establishing a competitive edge, resolving HR-related issues, boosting organizational performance, & enhancing HR functions. Specific information and abilities can be learned and adapted to close the knowledge and skill gaps. If the organization follows applicable principles and standards, evidence can be utilized and managed ethically and lawfully (Tomar and Gaur, 2020).

HR analytics provides workforce procurement more significant in terms of improving the performance of employees, improving efficiency, and retaining people for long-term growth and efficiency. The majority of companies do not

employ HR analytics, but those who do have a lack of analytics expertise, managerial support, insufficient data, and/or inability to successfully apply analytical techniques (Boakye and Lamptey, 2020). When it relates to developing a proof and HR data management innovation path to progress, the HR analytics process combined with HR approach alignment & help HR leaders and professionals to avoid costly mistakes to implement ethically questionable or dubious HR analytics practices while carefully taking into account one's strategic HR decisions (Falletta and Combs, 2020). HR may develop a fantastic strategic management relationship with the business by developing effective human resource strategies, which will result in two key results: greater administrative effectiveness and an extremely satisfied staff (Verma and Mehrotra, 2017). Current tendencies may cement HR's absence from major, deck influence while providing little value to businesses and harming employees' values (Angrave, Charlwood, Kirkpatrick, Lawrence and Stuart, 2016).

HR practitioners who want to use HR analytics will find this material useful. An ROI based perspective towards HR analytics is indeed a powerful tool for comparing and contrasting various dilemmas and the corresponding value which can be influenced by various kinds of HR analytics activities (Gal, 2019; Opatha, 2020). To provide and analyze HR-related information for company decision-making, there is a greater need for increasing collaboration among data analysts & HR experts. Moreover, for BD to get an influence on HR practices, cultural shift and organizational restructuring may be required, in addition to addressing technology barriers associated with BD (Dahlbom, Siikanen, Sajasalo and Jarvenpää, 2020). HR analytics helps with data analysis so that you can see patterns and take remedial action to keep the organization running smoothly. HR analytics has the greatest impact on organizational success. Companies look for more emerging technology strategies to boost efficiency. Data analytics offers a multi-dimensional process for developing a successful HR strategy (Lakshmi and Pratap, 2016). The level of employee engagement is greatly influenced by HR analytics. As a result, firms should use HR analytics to boost employee engagement (Oladipupo and Olubusayo, 2020).

HR is repositioning itself as a more key strategy, with a smaller role in organizational decision-making. Manpower analytics faces numerous barriers in its adoption, and the study identifies a few of them, including a lack of data analytics capabilities within HR, weak IT equipment, and inadequate corporate funding (Zeidan and Itani, 2020). Data-driven, proof-based HRM must

practice analytics, selection, and problem-solving to create appropriate HR policies. As a result, the notion of proof HRM, along with its powerful HR analytics technology, strengthens HRM's ability to make appropriate decisions (Reddy and Lakshmikeerthi, 2017). Despite the evidence, tying HR Analytics implementation to organizational success, HR Analytics implementation is minimal, and academic study, and thus proof on this subject, is limited (Marler and Boudreau, 2016). Using HR Analytics within the workforce has a good impact. Unfortunately, not all businesses have implemented the notion because human resources have not been highly adaptable to analytics (Manchanda and Gulati, 2018). Although there are ideas for theoretical frameworks that might be used for seamless inclusion, there is a paucity of research that examines the true relevance of these concepts and the effectiveness (or failure) of all these concepts or tactics when applied in the setting of organizations (Mohammed, 2019; Jain and Jain, 2020).

2.1 Significance of the Study

HR has a critical role in shaping, strengthening, and transforming an organization's cultural values HR is responsible for several aspects of organizational cultural identity, including pay, performance appraisal, training & development, hiring & onboarding, and maintaining the company's values. HR analytics would assist HR teams in tracking employee effectiveness and engagement to eliminate attrition and increase productivity. Human resource practitioners risk overlooking crucial trends, such as lousy management or a dearth of professional advancement, if they don't use HR analytics. The present study is an endeavor to explore HR analytics in revamping human resource management.

3. OBJECTIVES OF THE STUDY

HR Analytics, also recognized as people analytics, enables HR specialists to allow content decisions that will focus on improving the organization's potential to encourage, handle, and keep talented employees by supporting individuals in creating evidence-based decisions to establish improved work conditions and enhance performance.

Following are the objectives of the present study:

- To explore the role of HR analytics in human resource management.
- To find out various opportunities and challenges in using HR analytics in human resource management.
- To explore the importance of HR analytics in today's time in organizations.

4. RESEARCH METHODOLOGY

A collection of techniques and practices used to perform an analysis is referred to as "research methodology."

This research makes use of both primary and secondary data. The research is primarily descriptive.

4.1 Primary Data:

In-depth interviews of 15 HR professionals were used to gather primary data for the study. These HR professionals belong to different service sectors across India. Telephonic and face-to-face interviews are used to perform semi-structured interviews.

During the interview, HR experts were asked the following questions:

Q1: Do you use HR analytics in your organisation?

Q2: Do you think HR analytics is important for the organisations to implement?

Q3: What is the role of HR analytics in human resource management?

Q4: What are the possible opportunities and challenges of using HR analytics in human resource management?

4.2 Period of Study:

The study has taken two months to complete. In-depth interviews with HR experts were conducted for two months, followed by a review and conclusions.

4.3 Sampling and Type of Sampling:

The current study's sampling is chosen based on the researcher's convenience. It means the study makes use of convenience sampling. For data collection, 15 HR experts were interviewed.

4.4 Secondary Data:

Secondary data is also included in the present study. Books, studies, journals, and scholarly articles are all good places to look for primary data. Primary data is gathered from a variety of trusted databases. Some of the databases used in the analysis were Google Scholar, Research Gate, Elsevier, EBSCO Host, and JStor. All secondary data is sourced from reputable and reliable sources.

5. RESULTS AND INTERPRETATION

5.1 Objective 1:

Role of HR analytics in human resource management:

Data analytics is becoming commonplace across several company activities; therefore HR analytics performs a key influence in human resource management. The implementation of modern data

gathering and business intelligence approaches to workforce data is known as HR analytics.

Organizations can connect workplace and financial information to align personnel initiatives with corporate outcomes to optimize HR activities. HR analytics, also known as workplace analytics or talent analytics, allows HR professionals to make smarter recommendations based on actual data. Analytics can assist anticipate employee retention and has a wide range of modeling abilities for workplace planning.

Following is the role of HR analytics in HRM:

Analysis of Data: The data gathered via the usage of HR analytics is used to examine data. HR analytics assist in information unification and give input-output evaluations for workers, cost-benefit, or social evaluation all of which may be analyzed utilizing statistical analysis.

Management of Employees: Human resource analytics is crucial in the management of a company's workforce. This platform keeps track of important information about employees' backgrounds, such as their experiences, skillsets, and knowledge. It contains information that assists the HR division in the recruitment process by analyzing resumes as well as other pertinent information using various metrics. HR analytics determines what is causing a group's turnover rate to rise or fall. Employee or work happiness, job engagement, duration in the job, and any other pertinent facts about the worker are all kept in this file.

Performance Management: HR analytics aids in the development of a road map for evaluating employee performance by providing low - and high metrics. HR analytics shows overall effectiveness and areas where enhancement is needed for progress. This explains what workers do and how they do it.

Retention: Analytics professionals may help HR managers do this by presenting typical indicators such as staff turnover, previous resignation records, involuntary staff turnover, and so on. The capacity to analyze patterns across the period, among business segments, or between important sets of people to overall organizational consequences is the differential. The capacity to swiftly construct comparisons, spot patterns, and locate exceptions, which falls within the purview of analytic managers, is what creates the disparity.

Personal Data Protection: Any organization that wants to protect itself against attacks must prioritize data security. HR analytics securely

manages and saves a large volume of data. When a business employs HR analytics, data can be converted, and illegal use of the material is impossible.

Compensation Management: Compensation and Incentives' major goal is to establish the maximum potential degree of the worker value proposition that encompasses both monetary and non-monetary compensation and bonuses. Finalizing the optimum financial incentives programme necessitates developing an analytically based equation that is both financially sustainable and consistent also with a long-term goal. HR analytics assists Human Resource Management in determining the optimum balance between what the organization spends and what employees value.

Training and Development: A solid analytical foundation is required for planning appropriate worker training and development that would be able to execute to the business's desired quality or with the desired levels of work achievement. Analytics would assist HR in properly developing employees by detecting training gaps at both the local and global scales. On a bigger level, analytics can investigate big picture forecasts about a corporation's demands. This will aid in determining the actual requirement and making the best judgments possible on how to best introduce new capabilities into the business.

Hiring and Selection: The provision of real flash estimates of Talent demands enabled by HR analytics could be tremendously beneficial to organizations with large employee populations and multiple groups working in numerous geographical areas. HR analytics helps to assist hiring and recruitment requirements. HR professionals implement analytics practices to get manpower data and the organization demands.

Develops and distributes brilliant projections: HR analytics software utilizes statistical techniques to demonstrate the influence of facts on the workplace. This results in frameworks that reveal graphical perspectives into problem areas, variables that increase or decrease efficiency, and so on.

5.2 Objective 2:

Various opportunities and challenges in using HR analytics in human resource management:

Following are the Opportunities:

Determine the Cause of Staff Attrition: The HR department is responsible for the development, recruitment, training, and retention of personnel. To achieve organizational goals, effectively & efficiently businesses place a

premium on employee engagement. HR analytics allows businesses to determine the cause of employee attrition. Corporations make an effort to keep valuable personnel and lower attrition rates.

Boosts staff performance: The duration of term of employees was discovered to be a strong indication of efficiency, enabling the firm to develop a model for high-performing locations as well as an engagement resource for supervisors to utilize to improve performance.

Employers may now understand what inspires their employees and what prevents them from achieving their full potential.

Helps to gain Competitive Advantage in the Marketplace: HR analytics empowers HR practitioners and executives to create data-driven selections and affects how an organization's HR operation is handled, giving them a competitive advantage. It administers the company by tying the HR department to the company's goals. HR analytics enables rational decisions, resulting in a competitive edge through improved economic and administrative performance.

Improved Organizational Output: HR analytics assists firms in gaining a better insight into their personnel and fostering staff confidence, resulting in improved work performance. This helps the organization to enhance its functioning.

Working to improve employee experience: Using technologies like HR analytics to analyze how powerful a worker's sense of connection is and what adds to it can assist enhance business culture & develop a better working atmosphere.

HR like a Real Competitive Leader: HR analytics assists firms in communicating sound recommendations within the company. Decision-making is now assessed through practical and strategy alignments, rather than being reliant on projections. It enables the HR division to function as a strong manager by providing useful information.

Well Organized Trainings: Trainers can design innovative techniques to adjust programs and make employees highly productive by leveraging HR statistics.

Emphasize HR Initiatives and Decisions: HR analytics has helped HR departments to make a dynamic move from old systems to financial and operational systems to shape and develop businesses. This has aided in the organization's HR component role being bridged. Because of the

absence of analytical methodologies to analyze results, the HR activity traditionally lagged.

Following are the Challenges:

Lack of data analytics experience: Despite the fact that organizations promote the use of analytics within HR operations, the reality is that the majority of HR specialists' analytics skills are inadequate. Many of them will also require appropriate training to master the art of translating data into actionable insights. In most firms, this makes the effective adoption of analytics in HR a challenging and complex undertaking.

Compliance and privacy: To get the required outcomes, analytics requires a large volume of knowledge from a variety of reliable sources of information. HR practitioners must prioritize privacy while acquiring knowledge on a worker or prospective employer, especially from external factors. Acquiring personal information from employees can get the organization in difficulty at times.

Support from Higher Level Management: HR analytics does not have the approval of the company's top executives. Because management has been following the old procedure for so many years, firms have had difficulty gaining their help for engaging in technologies that capture and analyze worker data. To establish robust HR analytics, senior management will want a higher return on spending.

Problem with Data Quality: Because firms have a large volume of data that is difficult to acquire, process, and maintain, HR analytics suffers data quality difficulties. Due to the absence of reliable data provided by workers, data obtained may include inaccurate attributes. Duplicate material may exist, or material may be corrupted while being transferred from one origin to another. The HR analytics solution delivers findings based on the data accessibility, however, if there are issues with data quality, the outcomes were not as anticipated.

5.3 Objective 3: Importance of HR analytics in today's time in organizations:

Following is the importance of HR analytics in today's time in organizations:

- It helps to recognize the employees.
- Helps to make the best use of resources.
- Prepare for the future, track employee productivity, and analyze the workforce of their firm.
- Helps to create a competitive advantage in the marketplace.

6. CONCLUSION

HR analytics analyses all essential HR input and interprets it more effectively. The introduction and use of HR analytics within organization have proven difficult, according to this article, because HR practitioners may lack the necessary expertise and understanding to use the HR analytics technology, and there may be information security or data management concerns. The business has evolved the use of HR analytics which increases organizational productivity as a result of technological advancements and advancements in sectors. Prediction analyses and approaches are used to quantify and enable data-driven strategic thinking in HR analysis. The company's support from senior executives may be harmed as a result of this issue. Despite these obstacles, HR analytics have aided firms in establishing an economic edge resolving; HR-related issues, boosting organizational performance and enhancing HR functions. Acquiring and applying particular information and abilities can help to bridge the skills and knowledge divide. If an organization follows applicable policies and conventions, the material can be utilized and managed responsibly and lawfully. HR analytics used correctly at the appropriate period and in the appropriate industry can contribute to great development in an organization, allowing it to grow more quickly. HR analytics would soon become more widely used, assisting organizations in obtaining proof outcomes and transforming HR departments' operations from classical to statistical decision making.

REFERENCES

- Alsuliman, B. R. A., & Elrayah, M. (2021). The Reasons that affect the implementation of HR analytics among HR professionals. *Can. J. Bus. Inf. Stud.*, 3(2), 29-37.
- Angrave, D., Charlwood, A., Kirkpatrick, I., Lawrence, M., & Stuart, M. (2016). HR and analytics: why HR is set to fail the big data challenge. *Human Resource Management Journal*, 26(1), 1-11.
- Ben-Gal, H. C. (2019). An ROI-based review of HR analytics: practical implementation tools. *Personnel Review*, 48(6), 1429-1448.
- Boakye, A., & Lamptey, Y. A. (2020). The Rise of HR Analytics: Exploring Its Implications from a Developing Country Perspective. *Journal of Human Resource Management*, 8(3), 181-189.
- Dahlbom, P., Siikanen, N., Sajasalo, P., & Jarvenpää, M. (2019). Big data and HR analytics in the digital era. *Baltic Journal of Management*, 15(1), 120-138.
- Falletta, S. V., & Combs, W. L. (2020). The HR analytics cycle: a seven-step process for building evidence-based and ethical HR analytics capabilities. *Journal of Work-Applied Management*, 13(1), 51-68.
- Lakshmi, P., & Pratap, P. (2016). HR analytics-a strategic approach to HR effectiveness. *International Journal of Human Resource Management and Research*, 6(3), 21-28.
- Jain, P., & Jain, P. (2020). Concept Note on HR Analytics. *International Journal of Research and Analytical Reviews*, 7(2), 412-418.
- Jain, P., & Jain, P. (2020). Understanding the Concept of HR Analytics. *International Journal on Emerging Technologies*, 11 (2), 644, 652.
- Manchanda, P., & Gulati, S. (2018). HR Analytics at Work: Making More Powered Organisations. *Effulgence-A Management Journal*, 16(Spl2), 132-141. <https://doi.org/10.33601/effulgence.rdias/v16/ispl2/2018/132-141>
- Marler, J. H., & Boudreau, J. W. (2017). An evidence-based review of HR Analytics. *The International Journal of Human Resource Management*, 28(1), 3-26.
- Mohammed, A. Q. (2019). HR Analytics: A modern tool in HR for predictive decision making. *Journal of Management*, 6(3), 51-63.
- Momin, W. Y. M., & Mishra, K. (2016). HR analytics: Re-inventing human resource management. *International Journal of Applied Research*, 2(5), 785-790.
- Oladipupo, O. O., & Olubusayo, F. H. (2020). Human Resource Analytics Dimensions and Employee Engagement in Manufacturing Industry in Nigeria: A Conceptual Review. *Journal of Management Information and Decision Sciences*, 23(5), 629-637.
- Opatha, H. H. D. P. J. (2020). HR Analytics: A Literature Review and New Conceptual Model. *International Journal of Scientific and Research Publications*, 10(6), 130-141.
- Reddy, P. R., & Lakshmikeerthi, P. (2017). HR analytics-An effective evidence based HRM tool. *International Journal of Business and Management Invention*, 6(7), 23-34.
- Tomar, S., & Gaur, M. (2020). HR analytics in Business: Role, Opportunities, and Challenges of Using It. *Journal of Xi'an University of Architecture & Technology*, 12(7), 1299-1306.

Varma, C., & Chavan, C. (2019). A Case of HR Analytics–to Understand Effect on Employee Turnover. *Journal of Emerging Technologies and Innovative Research*, 6(6), 781-787.

Verma, S., & Mehrotra, R. (2017). Research paper on role of analytics in renovating human

resource management. *International Journal of Management*, 5(5), 17-23.

Zeidan, S., & Itani, N. (2020). HR Analytics and Organizational Effectiveness. *International Journal on Emerging Technologies*, 11(2), 683-688.
