

HR ANALYTICS'S ROLE IN BUSINESS ORGANIZATION

Dr. Gargi Chaudhary¹

¹Assistant Professor, NICE School of Business Studies, Shobhit Institute of Engineering & Technology, (Deemed to-be-University), Meerut- 250110, India.

DOI: <https://www.doi.org/10.58257/IJPREMS30678>

ABSTRACT

In today's data-driven world, making decisions is evolving in the context of human resources. HR analytics assist firms of all types and across all industries in managing talent, administration, and recruiting choices. HR analytics is the technique of gathering and analyzing HR data in addition to enhancing an organization's workforce productivity. It is widely used in organizations to collect and analyze data, enabling management to make informed decisions about their workforce, which is the main factor in organizational decision-making. The HR analyst can also use this set of statistical tools to gather up-to-date information about employees and make precise decisions that support top management's goals. HR analytics allows organizations to solve complex problems with intelligent judgments. HR analytics thus coordinates HR strategy with overall business strategy to get a competitive advantage. Analytical processes for measuring sub-HR functions have been completed. This study will examine its various roles in the business; to adopt HR analytics as a tool in an organization. This study contributes significantly to the theoretical concept of HR analytics based on the secondary data collected from previous research, blogs, books, and websites that provide data related to HR analytics.

Keywords:- Human Resource Analytics, Human Resource Data, Decision-Making, Business Strategy, Workforce Productivity.

1. INTRODUCTION

Human resource management focuses on investing all the tools and techniques, procedures and strategies, approaches and measurements, and approaches and measures to understand the performance of employers and employees who work together to achieve the organization's goals. People are valuable assets in any organization.

Human resources are an essential factor since the HR department results in successful organizational performances by developing the relationship between HR activities and business outcomes. (Simón & Ferreiro, 2018) Every function in every business is vital because its results can be easily investigated. The HR function in any organization lags due to its reliance on metrics and scorecards of quantifiable data. Due to the qualitative nature of HR data, most of it could not be quantified. However, HR now focuses on understanding how people influence the organization in adopting technological advances. As companies collect vast amounts of HR data, it becomes more complex to collect and analyze.

During the previous few years, the organization has experienced tremendous expansion, particularly in the twenty-first century and in the service sector. As industries grow at a rapid pace, new advanced processes and technologies are being developed. (McCartney & Fu, 2021) Organizational functioning has improved due to development and new methods, and these companies are growing successfully and efficiently. Organizations are seeking to strengthen their comparative edge.



Figure 1: HR Needs Skills

(Source- www.res.cloudinary.com)

However, HR is now focusing on understanding how individuals affect the organization. HR analytics has evolved into measuring qualitative information as well. It assists in the collection, interpretation, and measurement of HR data.

It also contributes to improved future decisions by providing current and accurate data. HR analytics gives in the resolution of organizational challenges. HR analytics helps to integrate HR strategy with overall business strategy.

The ambition of human resource management is to use all available tools, techniques, procedures, strategies, and approaches to understand how well employers and employees work together to achieve common organizational goals. Every organization requires strong human resources.

Since HR contributes to the successful performance of an organization by creating a link between HR activities and financial results, HR plays a key role. Only the HR function of any business has lagged due to its reliance on metrics and scorecards of data that can be quantified. All functions of any organization play an important role because their results can be easily examined. Due to its qualitative nature in the HR function, most of the data could not be quantified. However, as technology advances, HR is moving forward in its knowledge of how people impact the organization. Organizations generate a large amount of HR data, which makes its collection and analysis challenging.

The organization has had tremendous expansion in recent years, particularly in the 21st century's in-service sector. Due to the sector's rapid growth, new cutting-edge processes and technologies have been developed. Organizational operations have improved as a result of development and new methods, and these organizations are growing effectively and efficiently. Businesses strive to increase their competitive advantages. Businesses are embracing these technologies and practices in a big way since they can help keep using the HRD and because human resource management is crucial for any firm.

It is the only organizational function that directly affects its workforce. For employers and employees to come together and collaborate to achieve competitive corporate goals, HRM offers all the tools, techniques, approaches, principles, and forms of behavior recommendations. These organizations are seeking to implement these technologies that can improve their working practices since they recognize how vital HRD is for any organization.

Only the HR function lagged due to its reliance on metrics and scorecards of quantifiable data; the majority of HR data was qualitative and could not be quantified; interpretation of HR data was mostly based on intuition. However, HR is now working to better understand how employees impact the company. The firm has evolved its HR analytics to also quantify qualitative data. HR analytics helps in collecting, analyzing, and measuring HR data. HR analytics offers up-to-date, accurate data and helps with future decision-making. It helps in solving organizational problems. Analytics in HR synchronizes HR strategy with corporate strategy. This research will investigate the numerous functions that HR analytics can perform in an organization. Based on the secondary information gathered from prior studies.

2. LITERATURE REVIEW

HR Analytics

Human resource analytics is widely known as workforce analytics or talent analytics; it is a practice that will help organizations work with human resources data effectively and efficiently, thereby supporting the growth of their organizations. (Lee et al., 2022) It is critical to anticipate crucial factors that allow successful decisions to be made based on a large amount of employee data. HR Analytics is intended to be a tool that combines statistical methodologies to enable data collection, interpretation, measurement, and forecasting.



Figure 2: HR Analytics Tells What Organization Wants

(Source- www.assets.entrepreneur.com)

(Ragimol et al., 2021) HR professionals can have a better grasp of current trends, employee futures, and the best strategies to increase productivity; by using analytics. If enterprises are to carve out a place for themselves, there is a

skills shortage and increased demand for effective workforce planning. The endmost goal of human resource managers has always been to hone employees' competencies and skills.

Employee qualities and performance must be measured, which can be done through workforce analytics, which can assist in translating data into quantifiable results. This will help in manpower planning for the top management as well as help to make strategic decisions.



Figure 3: Evolution of Human Resource Analytics

HR performance measures allow us to determine whether results are satisfactory. Most HR analytics are accurate. It helps in determining the effectiveness and efficiency of the company's human resources policy.

Analytics explains what is happening, why it is happening, and what the outcome is. If the management level of the organization has an opinion about the parameters of the employees, data is collected to update the opinion and the corresponding metric is analyzed, which can be a cost of lost productivity; absenteeism productivity, cost of hire, and other important metrics. Analytics helps to identify the reasons and determine how they affect the business. This information helps identify mistakes when reviewing HR metrics, which creates awareness among managers, allowing them to correct or average measurements, and reducing the impact of weaker metrics.(Madhani, 2022; Nagpal & Mishra, 2021)

Recently HR departments of various organizations have begun to engage with workforce data due to the ongoing digital transformation to make data-driven decisions in areas such as recruiting & selection, performance evaluation, diversity and inclusion, and manpower planning. Researchers have referred to this application of leveraging worker data to improve decision-making as HR analytics. Researchers have referred to this application of leveraging worker data to enhance decision-making as HR analytics. (Aral et al., 2012)(Rasmussen & Ulrich, 2015)(Angrave et al., 2016)(Marler & Boudreau, 2016)(McCartney & Fu, 2021), People analytics (Fernandez & Gallardo-Gallardo, 2020; Green, 2017; Kane, 2015)(Peeters et al., 2020; Tursunbayeva et al., 2018), Talent analytics(Harris et al., 2011; Sivathanu & Pillai, 2019), human capital analytics (Andersen, 2017; Boudreau & Cascio, 2017; Levenson & Fink, 2017; Minbaeva, 2018) and workforce analytics (Huselid, 2018; Simón & Ferreiro, 2018).

As it is well known now, HR Analytics is the process of collecting, processing, transforming, and managing HR-related data, which is then used to create analytical data models. The analysis process focuses on linking HR practices with strategic business plans and uses a level of descriptive, predictive, and prescriptive analysis to achieve the desired outcome.(Three Types of HR Analytics: Descriptive, Predictive, and Prescriptive, 2020)

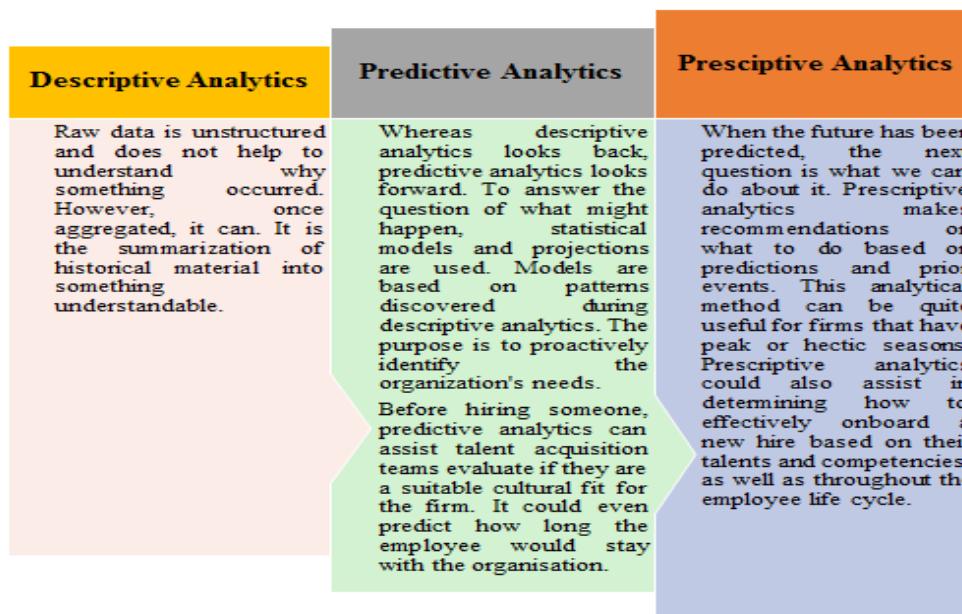


Figure 4: Three Types of HR Analytics

3. RESEARCH METHODOLOGY

To achieve the study objectives, previous research works on HR Analytics were searched and collated from various online databases. Key terms such as Human Resources, Analytics, and Roles of Analytics in Business were utilized to identify the papers. The identified studies were thoroughly examined and conclusions were drawn.

This research study is purely based on the secondary data available from previous research, magazines, blogs, books, and websites. The researcher used qualitative research and the nature of this study is descriptive. The information is extensively assessed to understand and determine the role of HR analytics in the current scenario.

Research Objective

This study will examine its various roles in the Business to adopt HR analytics as a tool in an organization.

4. DISCUSSION & CONCLUSION

HR analytics is very important in the field of human resources. HR functions that leverage analytics tools can grow faster and make evidence-based decisions. HR analytics collects and analyzes past data to present positive and negative trends to companies. It easily compares the organization's performance with the competition. Human resource analytics is essential in workforce planning, competitive advantage, employee recruitment and retention, data acquisition, organizational reporting and modeling, performance management, data manipulation, selection of appropriate modeling methodologies, and other areas. Some of the roles are discussed below:



Figure 5: Roles of HR Analytics

- **Smart Executable Plan**-HR analytics tools use statistical techniques to demonstrate the influence of data on the company. This generates approaches that provide visual perspectives on performance gaps and factors that increase or decrease Productivity.
- **Managing Productivity**-This part describes the what and how of an employee's performance. HR analytics aids in the development of a road map for evaluating employee effectiveness by providing high and low-performance indicators. HR analytics gives performance levels as well as performance enhancements needed for growth.
- **Statistical Analysis**-Data is analyzed using the information gathered through HR analytics. HR analytics may aid with data integration and give input-output analyses for employees, cost-benefit analyses, and social-networking analyses by utilizing statistical analysis. This technique also aids in employee happiness and performance review. This is important for project planning and use, as well as for communication and interaction methods.
- **Managing the Staff**-Human resource analytics is critical in managing a company's workforce. These tools save pertinent data from user profiles like experiences, skill set, knowledge, and so on. It contains information that assists the HR department in the hiring process by analyzing resumes and other pertinent material using various metrics. HR analytics examines the reasons for an organization's increased or decreased attrition rates. This

maintains track of employee or works happiness, job involvement, years in the role, and other information about the relevant individual.

- **Information Security**-The security of any information is essential for any organization to defend itself from threats. HR analytics secures and retains a massive volume of data. Data cannot be modified and unlawful use of data is impossible when a business uses HR analytics.

Important aspects of managing human resources with HR analytics

The following areas in which HR Analytics is essential for improving human resource management in an organization are:

- It offers evidence-based remedial measures to lower unwelcome employee turnover, allowing for proper recruiting in crucial roles and foreseeing top talent and successors for an organization.
- Analyzing the absence rate and causes of excessive absenteeism enables action to be taken to maintain organizational welfare.
- It displays diagnostic information on revenue per employee (RPE), a metric used to determine how much each person contributes to the organization.
- The assessment of the employee productivity index aids in focusing on staff performance and identifying those performing well and those who are not.
- It aids in determining the employees' motivation and morale levels.
- It offers logical, quantitative information on the verifications of the cost of hiring each person.
- It produces results to control the price of an employee's training and hence control unnecessary spending. This will aid management in revising their evaluation of training efficacy.
- It is important for staff retention, talent turnover, and connecting aspects that are similar.

Prospects for HR Analytics

With all the flow of digital communication, the typical human resource functions demonstrate dynamic and complex accountability. When the current digital disruption era reaches its pinnacle in 2021, it will be crucial for the human resources department to concentrate on making important choices about the organization's employees. Given this, some possibilities for employing HR analytics for efficient workforce management include:



Figure 6: Analytics in HR

(Source- www.ecpi.edu)

- Improved HR measurement trade-offs: Organizations can use historical and present trends, gather performance information, and manage trade-offs between indicators with higher and lower influence on the workforce by using HR analytics diagnostic approaches.
- Enhanced competitive edge: Making personnel decisions based on a data-driven strategy gives a company a competitive advantage in their day-to-day operations, which helps them achieve their intended goals.
- Real HR data: Investing in analytical software will assist the organization in obtaining real outcomes, keeping it transparent to all stakeholders.
- Increased productivity time: By automating several personnel subsystems with the aid of analytical tools, HR executives will be relieved of their tedious tasks and given more time to focus on other tasks.
- Increased quality thresholds: By properly analyzing employee data, all organizational data is kept under regular review, which will raise the bar for human resource measures' quality thresholds.

- Forecasting ROI: A growing number of organizations are utilizing analytics in day-to-day HR operations to evaluate the return on investment in crucial areas like talent management, training, and employee retention, as well as forecast the effects of the organization's people policies.

While HR analytics is becoming more popular as a topic of study, it is still a relatively new notion. As a result, scholars and practitioners are preparing to study how HR analytics and the expanding volume of people data can affect HR decision-making and organizational outcomes. By assessing the previous research done on HR analytics; the current study highlights the significant roles of HR analytics in Business.

(How 5 Successful Companies Are Using HR Analytics | Human Resources, 2020) HR analytics has been implemented by many large organizations (some of them are Google, Microsoft, Wal-Mart, Juniper Networks, and Royal Dutch Shell), and they have begun to make better employment decisions but it is still widely ignored. Organizations must seriously examine the widely accepted importance of applying analytical tools to their benefit. However, in many industry sectors, the immediate prospects for maintaining an effective workforce have prompted all HR practitioners to look forward to improved HR practices based on analytical data, such as forecasting employee turnover, attrition rates, learning and development, and talent management. HR analytics will increase, assisting organizations in obtaining evidence-based results and transforming the HR department's operations from traditional to statistical decision-making.

HR analytics used correctly at the right time and in the right business can lead to remarkable growth in an organization, allowing it to grow faster.

This research article examines secondary data and information on HR Analytics gathered from journals, blogs, and websites. Future research can be conducted aimed at better understanding how HR analytics adds value to organizations on primary data.

5. REFERENCES

- [1] Andersen, M. K. (2017). Human capital analytics: the winding road. *Journal of Organizational Effectiveness: People and Performance*.
- [2] 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. <https://doi.org/10.1111/1748-8583.12090>
- [3] Aral, S., Brynjolfsson, E., & Wu, L. (2012). Three-Way Complementarities: Performance Pay, Human Resource Analytics, and Information Technology. [Http://Dx.Doi.Org/10.1287/Mnsc.1110.1460](http://Dx.Doi.Org/10.1287/Mnsc.1110.1460), 58(5), 913–931. <https://doi.org/10.1287/MNsc.1110.1460>
- [4] Boudreau, J., & Cascio, W. (2017). Human capital analytics: why are we not there? *Journal of Organizational Effectiveness: People and Performance*.
- [5] Fernandez, V., & Gallardo-Gallardo, E. (2020). Tackling the HR digitalization challenge: key factors and barriers to HR analytics adoption. *Competitiveness Review: An International Business Journal*.
- [6] Green, D. (2017). The best practices to excel at people analytics. *Journal of Organizational Effectiveness: People and Performance*.
- [7] Harris, J. G., Craig, E., & Light, D. A. (2011). Talent and analytics: new approaches, higher ROI. *Journal of Business Strategy*.
- [8] How 5 Successful Companies Are Using HR Analytics | Human Resources. (n.d.). Retrieved September 28, 2022, from <https://www.icslearn.co.uk/blog/human-resources/how-5-successful-companies-are-using-hr-analytics/>
- [9] Huselid, M. A. (2018). The science and practice of workforce analytics: Introduction to the HRM special issue. In *Human Resource Management* (Vol. 57, Issue 3, pp. 679–684). Wiley Online Library.
- [10] Kane, G. C. (2015). People analytics through super-charged ID badges. *MIT Sloan Management Review*, 56(4).
- [11] Lee, C. S., Cheang, P. Y. S., & Moslehpoor, M. (2022). Predictive Analytics in Business Analytics: Decision Tree. *Advances in Decision Sciences*, 26(1), 1–29. <https://doi.org/10.47654/V26Y2022I1P1-30>
- [12] Levenson, A., & Fink, A. (2017). Human capital analytics: too much data and analysis, not enough models and business insights. *Journal of Organizational Effectiveness: People and Performance*.
- [13] Madhani, P. M. (2022). Strategic Human Resource: Enhancing Performance With Six Sigma Approach. *Compensation & Benefits Review*, 54(2), 51–73. <https://doi.org/10.1177/08863687211045141>

[14] Marler, J. H., & Boudreau, J. W. (2016). An evidence-based review of HR Analytics. *Human Resource Management*, 57(3), 701–713.

[15] McCartney, S., & Fu, N. (2021). Bridging the gap: why, how and when HR analytics can impact organizational performance. *Management Decision*, 60(13), 25–47. <https://doi.org/10.1108/MD-12-2020-1581/FULL/PDF>

[16] Minbaeva, D. B. (2018). Building credible human capital analytics for organizational competitive advantage. *Human Resource Management*, 57(3), 701–713.

[17] Nagpal, T., & Mishra, M. (2021). Analyzing Human Resource Practices For Decision Making in Banking Sector using HR analytics. *Materials Today: Proceedings*. <https://doi.org/10.1016/J.MATPR.2020.12.460>

[18] Peeters, T., Paauwe, J., & van de Voorde, K. (2020). People analytics effectiveness: developing a framework. *Journal of Organizational Effectiveness: People and Performance*.

[19] Ragimol, Mr., A. G., S., & F. J., P. (2021). Effective Workforce Management using HR Analytics. *RSP Science Hub*, 3(0), 82–86. <https://doi.org/10.47392/IRJASH.2021.171>

[20] Rasmussen, T., & Ulrich, D. (2015). Learning from practice: how HR analytics avoids being a management fad. *Organizational Dynamics*, 44(3), 236–242. <https://doi.org/10.1016/J.ORGDYN.2015.05.008>

[21] Simón, C., & Ferreiro, E. (2018). Workforce analytics: A case study of scholar-practitioner collaboration. *Human Resource Management*, 57(3), 781–793. <https://doi.org/10.1002/HRM.21853>

[22] Sivathanu, B., & Pillai, R. (2019). Technology and talent analytics for talent management—a game changer for organizational performance. *International Journal of Organizational Analysis*.

[23] Three Types of HR Analytics: Descriptive, Predictive, and Prescriptive. (n.d.). Retrieved September 28, 2022, from https://www.employecycle.com/three_types_hr_analytics_descriptive_predictive_prescriptive/

[24] Tursunbayeva, A., di Lauro, S., & Pagliari, C. (2018). People analytics—A scoping review of conceptual boundaries and value propositions. *International Journal of Information Management*, 43, 224–247.