



e-ISSN: 2319-8753 | p-ISSN: 2347-6710

IJRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 13, Issue 9, September 2024

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.524

9940 572 462

6381 907 438

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Impact of HR Analytics on Organizational Success: Strategic HRM in India's Business Intelligence Growth

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ABSTRACT: India has witnessed an exponential growth in Business intelligence and Business analytics in the past decade. Analytics has been implemented in most of the areas of business activities to help in decision making process. Thus, the organization can measure its performance and make decisions based on data-driven approach.

Human Resource Management has moved from operational discipline to strategic one in the past decade. HR analytics helps to monitor Human capital, make strategic decisions and tackle problems in HRM. HR analytics is a very new tool and has many scope to study. This study aims to explore the concept of HR Analytics and its implication towards organization's success.

KEYWORDS: HR Analytics, Human Resource Analytics, HR Metrics, workforce analytics, HRIS

I. INTRODUCTION

In the current market scenario, employees' performance and their potential will help gain competitive advantage from the competitors as well as it also promotes organization's success. Thus, human resource will remain one of the primary distinguishing factor for an organization for organization's growth, to create competitiveness and to enhance organization's value.

HR Analytics is an evidence-based approach that improves the performance of organization and individual by making a better decision with the help of data (Bassi & McBassi). It helps the organization to make accurate decision in HR functions like recruitment, performance appraisal, training and development activities, employee engagement, employee turnover etc.

Effective HR analytics help the HR managers in various HR functions like "forecasting the demand and supply of people, identifying suitable employments tests to suit applicant profiles, assessing training needs of employees, implementing pay for performance, and maintaining effective employee information to decide on rewards and managing employee discipline" (Mohammed, 2019).

According to (Opatha, 2020) "HR analytics provides a data-driven framework for solving workforce problems through analyzing data with a combination of software and methodologies that applies statistical models and derives new insights for smarter decision making that allow enterprise leaders to optimize human resource management while enhancing the strategic value of HRM".

II. OBJECTIVES OF THE STUDY

The objectives of the study are

- To study on the evolution of Analytics and Big data
- To study the concept of HR Analytics and HR Metrics with reference to organization
- To study the implementation of HR Analytics and the challenges an organization faces during the implementation.

- To study the various benefits of HR Analytics for the organization and its limitation.

III. METHODOLOGY

The study is exploratory or conceptual in nature where journals, research papers, published data in magazine, books are reviewed and analysed with the intention to get the understanding and clarity of the concept and also its relationship with various other constructs has been analysed thoroughly. Most of the journals and research paper reviewed are non-quantitative and very few research paper involved hypotheses testing and thus quantitative in nature.

IV. HR ANALYTICS

EVOLUTION OF ANALYTICS IN BUSINESS

Analytics is derived from Greek word analutika meaning science of analysis. It is defined as “the scientific process of discovering and communicating the meaningful patterns which can be found in data”. In the past decade, there has been a tremendous growth in the Business Intelligence, Analytics, Metrics and data science in the industry (Bowers et al., 2018). Many companies like SAP, Oracle, Microsoft etc., have been investing time and money to develop sophisticated Business Intelligence tools.

Today, organization has increased their effort to digitalize their processes in business because automate decision making is more efficient. It does not matter whether it is marketing, sales or in production, decision making based on data has become a necessity in today’s organization. Data analysis and visualization software has been extensively used along with business intelligence software like Microsoft Power BI, Tableau etc., to make accurate decision-making.

Using ‘Big data’ for decision making will change the traditional decision-making process. Big data “has the potential to support firms in identifying opportunities related to decision-making processes and in defining more efficient organizational process through the data acquisition, filtering and coding” (Caputo et al., 2019: 4).

The organizations are implementing analytics into their core business, operational and production function to capitalize on Big data (Davenport et al., 2012). There has been many studies conducted on Business Analytics have found that it helps in the improvement in decision-making in all the business areas like Sales, Finance, Marketing, Human Resource Management etc., and the potential benefits of analytics in HRM have also been identified.

CONCEPT OF HUMAN RESOURCE ANALYTICS

HR analytics can also be referred as talent analytics or people analytics or workforce analytics.

Human Resource Analytics is a very new concept in HRM and it has been considered very seriously by all the organization to implement the HR Analytics in their organization. HR analytics is the subdivision of Business Intelligence and is the process of collecting and analysing data related to human resource for organization’s success.

According to (Rasmussen & Ulrich, 2015) HR Analytics is an initiative which is evidence-based, where the decision is based on data and the HR investments like talent acquisition, learning and development etc. can be prioritized; the HR analytics also brings rigor to the to all the functions of HR and thus supplement the HR with intuition and objectivity.

Many authors over a decade have defined the HR analytics and they have addressed certain crucial points and have also addressed the different perspectives of HR analytics. Heuvel&Bondarouk (2016) defined HR analytics as “the systematic identification and quantification of the people drivers of business outcomes”.

According to (van den Heuvel & Bondarouk, 2017), HR analytics, in general, refers to “the use of analyses, data and systematic reasoning concern to people who are related to the organization. HR analytics includes “rigorously tracking of HR investments and outcomes” (Ulrich and Dulebohn, 2015, p. 202).

According to (Levenson 2005) “HR Analytics includes the use of statistical techniques, research design, and algorithms to evaluate employee data and translating results into evocative reports”.

Bassi (2011, p. 16.) defines HR analytics as “an evidence-based approach for making better decisions on the people side of the business; HR analytics consists of an array of tools and technologies, ranging from simple reporting of HR

metrics to predictive modelling” and Marler and Boudreau (2017, p. 15.) defines HR Analytics as “ the HR practice enabled by information technology that uses descriptive, visual, and statistical analyses of data related to HR processes, human capital, organizational performance, and external economic benchmarks to establish business impact and enable data-driven decision-making’.

Kiran et al (2018) defines HR Analytics as “means of providing a data driven framework for solving business problems using existing information to drive new insights; It is about smart decision making, delivered with the combination of software, hardware and methodologies that applies statistical models to work related data, allowing business leaders to optimize human resource management”.

The above definitions emphasizes that HR analytics is data-driven, analyses the data, involves not only collection of large amount of data but also involves predictive analysis which helps in decision-making. Clearly, HR analytics scope more than metrics, HR reporting and predictive analysis.

According to (Kremer, 2018) “the strategic role of HR Analytics goes beyond reporting HR metrics and connects HR decisions and processes with organizational performance i.e., the HR decisions and processes are not only based on sophisticated analysis of HR data but also involve data from different internal functions and even external data and most importantly the analysis of the data requires not only the respective information technology but also employees with the necessary skills to do analysis”

TYPES OF HR ANALYTICS:

According to Watson (2010) and Narula (2015), Analytics can be divided into 3 types viz.,

1. Descriptive Analytics
2. Predictive Analytics
3. Optimization Analytics

Descriptive Analytics is the first type or level of Analytics. In this level, historical data is understood in relation to behaviour and outcomes; this level describes only the relationship between the data variables (Fitz-enz, 2009).The descriptive analytics involves data visualization, Adhoc reports, queries like SQL, score cards, dash boards etc.; In this analytics, the organization can determine useful reports like turnover reports, the cost of per hire, report on absenteeism etc., (Mohammed, 2019)

Predictive analytics is the next level of analysis when compared to descriptive analysis where it included forecasting about the future outcomes which is based on the historical or past data. According to (Mohammed, 2019)the predictive analytics involves “the use of data mining i.e., correlation between the data, decision trees, pattern recognition, forecasting, root-cause analysis etc and also it predicts what would happen next; predictive analytics helps the HR managers in forecasting HR activities like attrition rates , probability of employee success on job based on tools used in selection process”

The last type or level of analytics is Optimization analytics which is concerned with the effectiveness or efficiency of HR Functions i.e., with the minimum resources the HR managers aims for maximum outcomes. According to Narula (2019), optimization analytics involves “using linear programming, simulations, creating mathematical modelling and implementing are used to find the best alternative training investment to achieve organizational effectiveness”.

V. HR ANALYTICS PROCESS

HR analytics contains several components and it can be explained with the simple model where it includes like steps data collection, merging of data, analyze the data using Big data and statistical tools and finally preparation of different types of analysis like cluster analysis, Decision Driver analysis, risk analysis and also forecasting which is referred as predictive anal analysis. With these insights from the analysis helps towards organizations’ success (Fig 1.1).

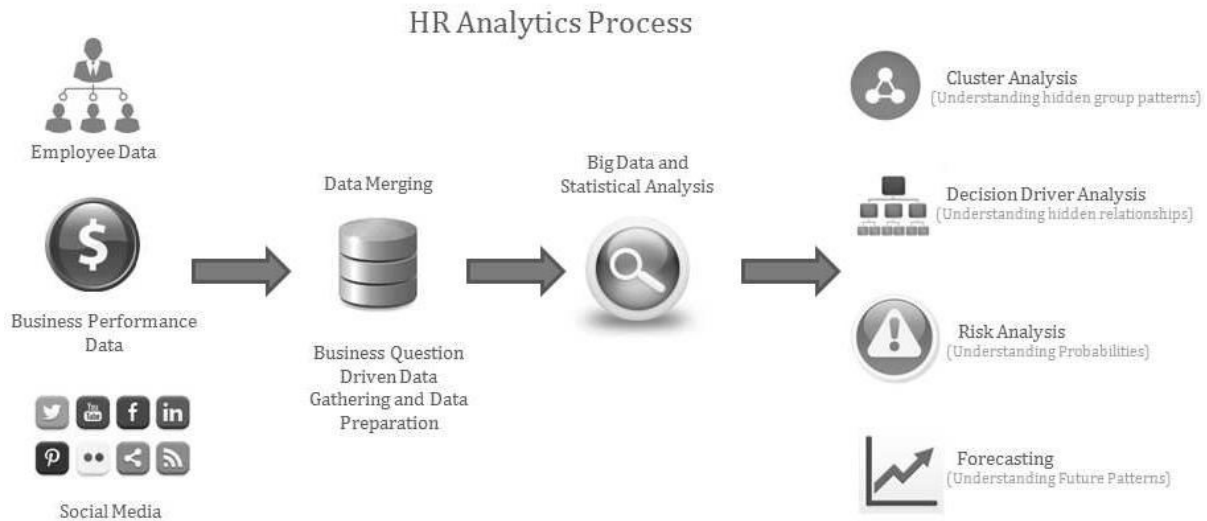


Fig 1.1 HR Analytics process developed by (Mohammed, 2019)

Large amount of data is collected to analyse and evaluate the practices like talent acquisition, Training, Performance appraisal etc. This component of collecting data is very important and after collection it has to be aggregated for further analysis. According to (Kremer, 2018), “HR Analytics collects and analyses not only HR data but also data from other internal functions and data external to the organization, a whole enterprise approach is needed” i.e., it collects data from all the relevant sources like employee data, business performance data, social media etc., for decision making.

The next step in HR analytics process is merging of all the collected data from Human Resource Information System (HRIS) into a data warehouse. This merged data is processed with Big data and statistical tools for analysis and data mining where the data sets are sorted to identify the patterns and relationship between the variables.

The last step of HR analytical process is prepare different type of analysis like cluster analysis which is used to understand the hidden group patterns, decision driver analysis to understand the hidden relationship, risk analysis to understand the probabilities, forecasting to understand the future patterns etc., (Mohammed, 2019)

HR ANALYTICS PRACTICE:

HR Analytics has been strongly linked with better organization performance, employee satisfaction etc. According to Aral et al. (2012), the use of HR Analytics results in better financial performance in the organization.

HR Analytics can be applied in the organization by using the steps provided by Mondore, Douthitt and Carson (2011) which are “(1)Identify the most significant outcomes (2) Creating the cross-functional data plan (3) Implementing adequate measures to assess critical outcomes (4)Drafting and executing the plan (5) Measuring, modifying it post-implementation (6) Making other modification” (pg. 23-24).

HR analytics is an emerging discipline where it aims to be strategic partner in HR decision-making processes (Levenson, 2005). According to (Opatha, 2020) “HR analytics is more important as it improves the performance of the employees, improves ROI of human resources, provides opportunity to assess how employees contribute to the organization, forecasts workforce requirements and determines the best ways to fill the vacant positions, links workforce utilization to strategic and financial goals to improve business performance etc”

The HR analytics cycle contains broader range of HR analytics practices and data sources which includes HR research in context to social, behavioural and organization science and also there are no practical model or framework for HR managers to guide them in HR analytics (Falletta & Combs, 2021).

According to (Sharma & Sharma, 2017), “HR analytics was found to be a potential solution to increase accuracy and objectivity in the appraisal process with the use of sophisticated data analysis tools” and thus it results in increase employee satisfaction as they perceive that analytics increases accuracy and fairness in Performance Appraisal.

VI. DISCUSSION & CONCLUSION

People in the organization are considered as assets and managing employees in the organization helps to gain competitive advantage as well as face challenges and risks in an effective manner (Mohammed 2019). The need for HR analytics is greater in the current scenario as the benefits it provides to the organization is vital for the organization's success.

From this study, it has been found that HR analytics is comprised of complex constructs and requires the HR personnel to upgrade their skills in analytics to explore and utilize the full benefits of analytics. As HR Analytics matures, it has to coordinate with other department like Finance, Marketing, Operations etc., and in the due course it will become part of the cross-functional team and we will be looking at human capital elements in the entire value chain (Fernandez & Gallardo-Gallardo, 2021).

Due to intense competition and rapid changes in the business, HR Analytics has become a need of an hour and organization who have implemented and are on the process of implementation will have upper hand over their competitors and it also help the organization to strategize their HR functions.

REFERENCES

1. Aral, S., Brynjolfsson, E. and Wu, L. (2012), “Three-way complementarities: Performance pay, human resource analytics and information technology”, *Management Science*, Vol. 58 No. 5, pp. 913-931.
2. Bassi, L. (2011), “Raging debates in HR analytics”, *People and Strategy*, Vol. 34 No. 2, pp. 14-18.
3. Bharti, A. 2017. Human resource analytics. *South Asian Journal of Marketing & Management Research*, 7(5), pp 68-77.
4. Bowers, M. R., Camm, J. D., & Chakraborty, G. (2018). The Evolution of Analytics and Implications for Industry and Academic Programs. *Interfaces*, 48(6), 487–499. <https://doi.org/10.1287/inte.2018.0955>
5. Caputo, F., Cillo, V., Candelo, E., & Liu, Y. (2019). Innovating through digital revolution: The role of soft skills and Big Data in increasing firm performance. *Management Decision*, 57(8), 2032-2051.
6. Falletta, S. V., & Combs, W. L. (2021). 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. <https://doi.org/10.1108/JWAM-03-2020-0020>
7. Fernandez, V., & Gallardo-Gallardo, E. (2021). Tackling the HR digitalization challenge: Key factors and barriers to HR analytics adoption. *Competitiveness Review: An International Business Journal*, 31(1), 162–187. <https://doi.org/10.1108/CR-12-2019-0163>
8. Fitz-enz, J. (2009). Predicting people: From metrics to analytics. *Employment Relations Today*, 36(3), 1-11.
9. Fitz-enz, J. (2010). The new HR analytics: Predicting the economic value of your company's human capital investments. AMACOM.
10. Kiran K.S., Sharma, N. and Brijmohan D.R. (2018), “HR analytics: transactional to transformational HR approach”, *International Journal of Advance and Innovative Research*, Vol. 5, No. 3, pp. 1-11.
11. Kremer, K. (2018). HR analytics and its moderating factors. *Vezetéstudomány / Budapest Management Review*, 49(11), 62–68. <https://doi.org/10.14267/VEZTUD.2018.11.07>
12. Levenson, A. (2005), “Harnessing the power of HR analytics”, *Strategic HR Review*, Vol. 4 No. 3, pp. 28-31.
13. Levenson, A. 2011. Using targeted analytics to improve talent decisions. *People and Strategy*, 34(2), pp 34.
14. 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.
15. McCartney, S., & Fu, N. (2022). 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>
16. Mondore, S., Douthitt, S., & Carson, M. 2011. Maximizing the impact and effectiveness of HR analytics to drive business outcomes. *People and Strategy*, 34(2), pp 20.
17. Mohammed, A. Q. (2019). HR ANALYTICS: A MODERN TOOL IN HR FOR PREDICTIVE DECISION MAKING. *JOURNAL OF MANAGEMENT*, 10(3). <https://doi.org/10.34218/JOM.6.3.2019.007>

18. Mondal, S. R., Di Virgilio, F., & Das, S. (Eds.). (2022). HR Analytics and Digital HR Practices: Digitalization post COVID-19. Springer Nature Singapore. <https://doi.org/10.1007/978-981-16-7099-2>
19. NARULA, S. (2015). HR analytics: Its use, techniques and impact. CLEAR International Journal of Research in Commerce & Management, 6(8).
20. Opatha, H. H. D. P. J. (2020). HR Analytics: A Literature Review and New Conceptual Model. International Journal of Scientific and Research Publications (IJSRP), 10(06), 130–141. <https://doi.org/10.29322/IJSRP.10.06.2020.p10217>
21. 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>
22. Sharma, A., & Sharma, T. (2017). HR analytics and performance appraisal system: A conceptual framework for employee performance improvement. Management Research Review, 40(6), 684–697. <https://doi.org/10.1108/MRR-04-2016-0084>
23. Ulrich, D. and Dulebohn, J. H. (2015), 'Are we there yet? What's next for HR?', Human Resource Management Review 25(2), 188{204.
24. van den Heuvel, S., & Bondarouk, T. (2017). 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, 4(2), 157–178. <https://doi.org/10.1108/JOEPP-03-2017-0022>
25. Watson, H. J. (2010). BI-based Organizations. Business Intelligence Journal, 15(2), 4-6.



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