Transforming Human Resource Management with HR Analytics: A Critical Analysis of Benefits and Challenges

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Abstract

Human resources have long been a valuable organizational asset. Employees must be considered as resources to gain a competitive edge, and firms may survive in a competitive market by aligning human resources with essential business objectives. Organizational success has always revolved around human resources. The alignment of HR strategy with the company's overall strategy relies heavily on personnel analysis. Human resource analysis aids HR managers in developing strategies that will allow the company to outperform its competition. The revolution and difficulties of human resource management using hr analytics are examined in this study. Human resource analysis (HR) has the ability to greatly improve HR departments' decision-making capabilities in human and organizational capital. Sample of 217 respondents from HR team of different organizations were surveyed to know the benefits, challenges and impact of Transforming Human Resource Management with HR Analytics. It is found that there is a significant impact of transforming human resource management with HR analytics in an organization.

Introduction

Employees are more vital to the company's growth and profitability in any business. HR's conventional job is to collect and monitor personal data from professionals and executives via personnel numbers, payroll, health and safety,

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and performance management. HR departments are now generating more data than ever before thanks to new technology. They, on the other hand, frequently fail to transform their data into actionable managerial insights.

Poba-Nzaou et al. (2020) says that Every firm relies heavily on human resource management. Human resource management is a department inside an organization that is dedicated to improving employee performance in support of the business's strategic goals. The economic framework requires HR managers to place a premium on employee performance in order to create income for the company. However, corporate executives are concerned about shifting global economic and political situations, so their attention has switched to technologies that might help them succeed in difficult times. Organizational competitiveness is expanding in today's fast evolving economy. Companies must integrate their HR strategy with their entire company strategy in order to gain a significant competitive advantage. Human resources are essential to the operation of any organization's functional areas. As a result, human resources cannot be divorced from the organization's entire strategy. Babynina, (2021).

van den Heuvel & Bondarouk, (2017) People are an organization's most valuable resource. As a result, human resource management is an area of a company that deals with "people." However, corporate executives are concerned about shifting global economic and political situations, so their attention has switched to technologies that might help them succeed in difficult times. Organizational competitiveness is expanding in today's fast evolving economy. Companies must integrate their HR strategy with their entire company strategy in order to gain a significant competitive advantage. Human resources are essential to the operation of any organization's functional areas. As a result, human resources cannot be divorced from the organization's entire strategy. People are an organization's most valuable resource. Momin, (2015). As a result, human resource management is an area of a company that deals with "people." As a result, even in today's highly competitive climate, creating HR strategies that foster employee participation may help organizations become more responsive. The success of a company is determined on its employees. Human resources assist in coping and surviving in a fast-changing socioeconomic environment by maximizing company possibilities while minimizing risks and constraints. People are thus extremely valuable and give a strategic edge in a highly competitive market Thakre. (2020). Figure 1 presents the scope of the HR Analytics.

Literature Review

Zeidan& Itaani. (2020) Human analytics (HR analytics) is a type of analysis that involves applying analytical techniques to an organization's human resources department in order to enhance employee performance and maximize return on investment (ROI). Human resource analysis is more than just gathering information on employee performance. Instead, it tries to offer an overview of each process by gathering data and then analyzing it to make educated judgments about how to improve it. Human resource analysis is important for determining employee

Figure 1: Scope of HR Analytics

Source: AIHR

engagement as well as skills and competencies needed to meet business objectives. Human Resources may use HR Analytics to analyse data, discover patterns or concerns, and take proactive action with other divisions to keep the company running smoothly and economically. The application of substantial business analysis and data extraction tools to human resource data is known as talent analysis. Human resource analysis is a communication technique that uses data from a variety of sources to describe the present condition and forecast the future. Human resource analysis gives insight into the data gathering process and allows for rational and cost-effective judgments on how to enhance it. Novo Melo & Machado, (2021). HR analytics include, but is not limited to, statistical statistics and study design, as well as discovering and developing meaningful questions, as well as gathering and analyzing relevant internal and external data. HR department, establishing suitable rigor and relevance requirements, and improving HR analytical abilities throughout the firm.

Terziev & Arabska. (2017) Employee satisfaction levels are based on job history, which is collected through the complete workforce analytics function. This data is then loaded into sophisticated computer models. This model generates insights that HR managers may utilize to make key choices using powerful algorithms. For example, if the commission system should be adjusted to enhance sales, or whether more training should be invested to reduce the company's high dropout rate. In HR analysis, there are four basic roles that appear. HR analysts engage with managers and gather input from them on issues and concerns linked to their specific workforce in order to maximize each of these core duties. Acquisition, optimization, development, and compensation are the four basic roles. (Kumar Rajbhar, 2017).

(DiClaudio, 2019) HR analytics may now be used to solve a variety of HRM problems. HR Analytics gives HR the tools it needs to make a bigger contribution at the strategy table. Analytics changes HR with complete automation to meet the shifting problems in this changing HR market. HR Analytics transforms raw HR data into actionable knowledge that leads to strategy creation and, ultimately, a brilliant breakthrough. By leveraging the insights gained, HR analytics assists the firm in moving forward and staying ahead of the competition. Working on the strengths while eliminating the shortcomings. As a result, HR analytics is a commercial opportunity, particularly for HR, to make sense at the board table, where it was previously dismissed by other departments and the CEO. HR managers may now use structured and unstructured data sets to answer crucial questions like work productivity, the impact of advanced training programs on productivity, tiredness prediction, and the capacity to identify organizational leader candidates. The staff is the lifeblood of the company, and when it performs at its best, the company's overall goals are likely to be met. HR managers used to have a hard time discussing their role in shaping corporate strategy. They may, however, clearly demonstrate their worth by making fact-based judgments based on analytics-driven insights using HR analytics. The use of data mining and business analysis tools to human resource data is known as human resource analysis. HR analyses provide a high-level picture of how to manage employees effectively in order to meet organizational objectives swiftly and efficiently. HR analytics may assist firms figure out what data they need to collect and how to utilize it for modelling and forecasting.

(Ulrich et al., 2010) observed that in the recent decade, jobs in people management have gotten lot more complicated and richer with new material. Global trends are formed in many research, requiring new methods to HRM and their adaptation to new tasks and requirements. There is an objective conflict between enhancing the role of human resources in assuring the long-term viability of businesses and society as a whole and the managers' and human resource experts' inability to respond to changing economic and societal requirements. Furthermore, during the transition from the industrial to the post-industrial stage of growth, the world economy experiences major qualitative changes, which are defined by greater intellectualization of all types of activities and information in every technological activity.

Poba-Nzaou et al., (2020) Nobody can anticipate how the HR profession will evolve in the future. Nobody knows how HR practices will evolve in the future. However, it is advantageous to prepare for the future. Imagining the future can inspire fresh ideas. Thinking about the future can aid in the beneficial transformation of present HR practices. Many of the current and expected future developments are being fueled by technological advancements and the growing availability of human resource (HR) data. In any business, the most challenging problem has always been understanding human behavior. Although vital for work completion, traits, employee attitudes, job satisfaction, and many other aspects cannot be assessed. Ignoring these requirements might lead to an organization's downfall. However, HR faces a significant issue in controlling these aspects since they are critical, and you know that if they can't be assessed, they can't be managed.

As a result, the key to improving employee performance is to measure, measure, and regulate these variables. HR characteristics may now be measured thanks to the introduction of new IT-based solutions like HR analytics. HR analytics has assisted firms in delving into previously unquantifiable HR data to unearth a gold mine of HR insight that can be utilized to improve key performance metrics and hence boost efficiency. Every firm has huge hurdles in this highly competitive economy. This conundrum may now be resolved thanks to new cutting-edge technologies such as HR analysis, which enables HR department managers to make choices based on facts and evidence-based data. Senior HR Management can now justify investment in human resource projects and forecast future returns using HR Analytics. As a result, human resource analysis marks the start of a new era in human resource management that will solve the industry's most pressing issues and challenges.

An organization that recruits exceptional people, successfully employs human resources, manages talent, and retains personnel assures the company's long-term success. To play a more active role in human resource management, data analysis and effective usage are required. Metrics are commonly used by HR managers to track statistics including employee turnover and sick days. HR analytics is a new field that may assist HR in becoming a genuine strategic partner. HR metrics and HR analytics are not the same thing. Despite the fact that HR Metrics and Scorecards have been widely used, in recent years, HR has relied on the ability to analyze data to set itself apart. HR staff may now speak with executives, identify what they require, and make appropriate hires. Human resource analysis enables businesses to align HR performance with their strategic objectives.

Objective of the study

1. To know the benefits and challenges of Transforming Human Resource Management with HR Analytics.
2. To know the impact of Transforming Human Resource Management with HR Analytics on an organization.

Research methodology

Sample of 217 respondents from HR team of different organizations were surveyed to know the benefits, challenges and impact of Transforming Human Resource Management with HR Analytics. The present study is quantitative in nature in which the primary data is collected through random sampling method. Mean and t-test are the statistical tools applied to analyse the data and reach to end results.

Findings of the study

Table 1 is showing demographic details of the respondents in which it is found that in total 217 respondents 64.1% are male and 35.9% are female. Among them 33.6.0% are from the age group of 32-38 yrs, 36.5% belongs to age group 38-46 yrs and rest 29.9% are above 46 yrs of age. 29.9% in Training and development, 27.2% in Administration and Management, 32.3% of the respondents are working in recruitment department, and rest 10.6% are working in other HR departments. 24.9% of the respondents are HR Directors, 32.7% are HR managers, 27.6% are Recruiters and rest 14.8% of the respondents are working with different designation in HR department.

Table 2 is showing Benefits and challenges of Transforming Human Resource Management with HR Analytics. It is observed from the table that HR Analytics increase the decision-making capability of managers in all situations with mean score 4.03 and HR Analytics use AI to fill the performance gap amid an individual

Table 1. Demographic Details

Variables	Respondents	Percentage %
Gender		
Male	139	64.1
Female	78	35.9
Total	**217**	**100**
Age		
32-38 yrs	73	33.6
38-46 yrs	79	36.5
Above 46 yrs	65	29.9
Total	**217**	**100**
Department		
Training and Development	65	29.9
Administration & Management	59	27.2
Recruitment	70	32.3
Others	23	10.6
Total	**217**	**100**
Designation		
Director Human Resource	54	24.9
Manager Human Resource	71	32.7
Recruiter	60	27.6
Others	32	14.8
Total	**217**	**100**

and the team with mean score 3.93. The respondent says that HR Analytics provide information regarding organizational functioning with mean score 3.82 and Business and management take less interest to support HR analytics with mean score 3.80. There are some challenges like Lack of statistical skills and analytical skills in HR team is faced by HR analytics with mean score 3.74. HR Analytics provides employee related information in order to improve their performance with mean score 3.71. The respondent also says that there is Inadequate training skill development program with mean score 3.69 but HR Analytics is capable of doing complex tasks preparing future strategies with mean score 3.64. HR analytics face challenge due to insufficient tools for multiple data sources handling and statistical predictive analytics with mean score 3.63 and lack of communication between the clients and analytics team with mean score 3.28. Further t-test was applied to know the significance of the statements and found that the value under significance column for all the statements is below 0.05.

Table 2. Benefits and challenges of Transforming Human Resource Management with HR Analytics

S. No.	Statements	Mean score	t value	Sig
1.	HR Analytics increase the decision-making capability of managers in all situations	4.03	7.945	0.000
2.	HR Analytics provide information regarding organizational functioning	3.82	4.827	0.000
3.	HR Analytics provides employee related information in order to improve their performance	3.71	3.218	0.001
4.	HR Analytics use AI to fill the performance gap amid an individual and the team	3.93	6.457	0.000
5.	HR Analytics is capable of doing complex tasks preparing future strategies	3.64	2.130	0.017
6.	HR analytics face lack of communication between the clients and analytics team	3.28	3.301	0.001
7.	Lack of statistical skills and analytical skills in HR team	3.74	3.635	0.000
8.	Insufficient tools for multiple data sources handling and statistical predictive analytics	3.63	1.978	0.025
9.	Inadequate training skill development program	3.69	2.856	0.002
10.	Business and management take less interest to support HR analytics	3.80	4.588	0.000

Conclusion

In the coming years, personnel analysis will have a significant influence on organizational decision-making. Furthermore, workforce analysis is likely to have an impact on the makeup and functioning of HRM as a function. It can aid in the creation of a flexible and adaptable organizational structure based on the best possible mix of people's qualities and talents on the one hand, and the company's strategic objectives on the other. HR analysis has the capacity to modify organizational paradigms in this way. Overall, this research attempts to contribute a small amount to our understanding of human resource analysis by offering a view into the future. HR is viewed as a strategic business partner who adds value to the company. Human resources are the elements that execute a variety of activities that are critical to the company's success. To provide a competitive advantage for your organization, we must learn to better measure and manage overall human resource productivity and services, including employee recruitment and hiring, compensation and benefits, training and development, employee relations and employee retention programs, and much more. Human Resources develops internal analytical capabilities and ensures long-term alignment between the workforce and the company's goal. Companies that apply analytics may get the most out of their HR data and their employees' hidden worth. In the income statement and balance sheet, these intangible assets can be rendered physical. Organizations strive to build maturity curve improvement methods in order to get the maximum return on investment in their workforce, market leadership in resource analysis, and long-term competitive advantage.

The study concludes that there are number of benefits and challenges of transforming human resource management in HR Analytics as it increases the decision-making capability, fill the performance gap, provide information regarding organizational functioning. On the other hand, this faces Lack of statistical skills and analytical skills, Inadequate training skill development program and insufficient tools for multiple data sources handling.

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