

HR Analytics and its Impact on Organizations Efficiency

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ABSTRACT

HR analytics is taking part in major role in today's business dynamic environment with augmented business necessities towards organisation efficiency. HR analytics can be considered more credible as it provides statistically valid data and evidence that can be used to develop new strategies and implement existing HR strategies and other dimensions. HR Analytics aims to be the next solution to various HR challenges. HR Analytics plays an important role in aligning HR strategy with overall corporate strategy. Employers and organizations have recognized the opportunities that HR Analytics offers, but there is still plenty of room for growth. HR analytics helps HR managers make data-driven decisions on hiring, retention, training, rewards, career planning, and organizational effectiveness and efficiency. This paper reports the outcome of a comprehensive overview of HR analytics based on secondary data collected from previous research. This helps to understand the concept of HR analytics and also helps to understand the benefits and challenges of implementing HR analytics as a tool in organizations. This document is intended to provide guidance to both academics and practitioners on the concept and operation of people analytics. This paper concludes that the implementation and use of HR analytics in organizations is challenging as HR professionals may not have the skills and knowledge required to use HR analytics tools or may face data quality issues to have; Governance issues arise, but taking a broader view, the ability to use HR analytics will ease the challenges and lead to significant business growth.

Keywords: HR Analytics, Competitiveness, Effectiveness of organization, Strategic HRM, HRIS

I. INTRODUCTION

The field of human resources management has changed dramatically over time and is developing rapidly every day. While HR professionals still focus primarily on the "human" side of business operations, they are also increasingly dependent on technology and data. The advent of this data (and its impact on the HR process) has spawned new terms and new disciplines. It's human resources analytics. Strategic use of analytics can change the way people work, give teams insights, and enable them to proactively and meaningfully contribute to the company's bottom line.

HR Analytics is a practical tool for companies to understand where their strengths and weaknesses lie. Given that the workforce is the main driving force behind an organization, understanding the contribution of that workforce using quantifiable metrics will help the organization to understand what should they do or what shouldn't. In addition, the organizations can use this data to advance the organization's agenda and develop strategies for greater success. HR analytics shows the direct impact of HR data on key business results. The HR function can implement a practical methodology to help managers make the right investments, based on effective analytics and hands-on initiatives through HR analytics. In this regard, advanced statistical knowledge is required to determine the types of analytics needed to determine specific business outcome drivers that are applicable in various settings.

HR analytics plays an important role in aligning HR strategy with overall business strategy. HR Analytics supports HR executives in formulating strategies that allow the company to gain an advantage over its competitors. HR Analytics is supposed to be the next solution to various HR challenges. Automating many aspects

of HR, such as hiring, compensation, and performance metrics has allowed HR departments to focus on more complex aspects of HR, such as extraction of information on competitive human resources. HR analytics is the process of collecting, processing, transforming, and managing HR-related data, which is then analyzed using analytical models and tools (Kapoor & Sherif (2012)). The analytical process focuses on aligning HR with the strategic business plan (Naula, 2015). Similarly, the process uses HR data to link HR practices and policies to business outcomes and ultimately together to better understand the relationships between HRM and concepts such as commitment, satisfaction, productivity, and performance among employees. These describe, predict, and specify process levels each have their own advantages and merits, but the more an organization moves from description to description, the more value is added to the company and overall performance. large (Reddy & Lamikeerti, 2017).

Evolution of HR Analytics

In the early days of British rule over India, the work of the Human Resources Department is based on the principles of domination and subordination and was not a profession at the time. However, with the advent of modern industrial workers, democratic ideologies, the concept of a welfare state, etc., the role of HR has found its place in the economy as a profession. In the early 1950s, companies were unaware of the impact of human resource decisions on business strategy and globalization, but HRM was considered part of corporate governance.

HRM has its roots in data long before it was recognized by the organizations as HR Analytics. Actual HR measurements started with the challenge of finding the right people in the organization. This is also reflected in World War II when the US military faced a serious shortage of skilled workers. The US Army has developed a skill test and used this data to select the right people. Research in the field of HR analysis quickly grew to find large-scale applications in organizations.

In 1978, an article titled 'The measurement imperative' proposed the concept of measuring the effect of HR activities with collected data on the bottom line of the business. The proposed activities are personnel retention, staffing, compensation, competency development, etc. This concept marks the start of the data capturing activity in HRM and its application in organizations.

In 1990, as development progressed in the area of integration of HR measurements with more business dimensions, forecasting and evaluation models became the subject of research. However, many companies were unfamiliar with HR analysis and could not realize that potential.

In 2000, the emergence of HR accounting and profit analysis has been observed, which adds new dimensions and metrics for quantifying HR. Researchers have drawn conclusions not only from companies but also from other sources. One such study includes a metric model used by Billy Beane, general manager of the US baseball team, to select team members.

This study pioneered a metric-based selection model known as the "Moneyball" concept in 2003. It has been widely adopted by organizations since 2006.

HR analytics was developed at the end of 2000, but many companies are still confused about adopting and implementing it. Some well-known multinationals have taken the initiative to anticipate the potential and benefits of HR analytics and dig deeper into this area.

In 2009, Google launched the "Oxygen Project" to explore the qualities and characteristics of effective managers. The project was globally recognized in 2011 when it published database-driven results and proved to be highly relevant and effective in a variety of industries. The success of the project has boosted research into the usefulness of analytics in workforce management. Harvard Business Review, The Wall Street Journal, Forbes, Fortune, and more have published about 20 articles on topics related to talent and workforce analytics. A positive correlation like oxygen between academic performance and employee performance. However, Project Oxygen laid the foundation for a dynamic shift from traditional KPI-based HR measurements to predictive analytics for HR analytics.

IBM acquired Kenexa, an employment and retention services company, in 2012. By combining cloud-based solutions with Oracle, Tableau, and SAP, IBM has discovered ways to manage people by analyzing a wide range of big data in the human resources department.

Many companies have implemented HR analytics within their organizations as they observe the benefits of HR analytics as they make strategic business decisions. Well-known players in the industry include Microsoft, Mindtree, ConAgra Foods, and Wipro Ltd.

II. LITERATURE REVIEW

Tomar and Gaur (2020) have studied the opportunities and challenges of using HR analytics in business and analysed that proper use of HR analytics in the right business at the right time can significantly grow a company's HR analytic and accelerate its growth.

Zaiden and Itani (2020) reviewed HR analytics and organizational effectiveness by collecting secondary data. The study concluded that despite the rising popularity and interest in HRA, HR professionals still have a long way to go before they reach analytics maturity and the studies shows that HR is pivoting towards a more strategic function and playing a more curtail role in the organization's decision making

Lochab & Kumar (2019) studied the winding path of HR analytics and found that analytics has a significant positive impact on the functionality of every organization. It is found that the adoption of HR Analytics has helped the organizations in decision making as well as improving the performance of the organization. Companies with the highest levels of talent analytics, including the adoption of HR analytics, have 8% higher revenue growth, 24% higher net operating profit growth, and 58% higher revenue per employee.

Reddy and Lakshmikeerthi (2017) investigated the effectiveness of HR analytics as an HRM tool based on evidence. The study identified several factors that influence human capital analytic. These are the competitive mechanism, the institutional mechanism, the composition, the organizational structure, the working capital ratio, the soundness of the financials, the direction of innovation, and the size of the organization. The study also identified barriers to the implementation of HR analytic. These include inconsistencies in data, data quality, lack of common methods for analysing HR data, management approval, skills in analytical knowledge, and inaccurate timing.

George L., & Kamalanabhan T. J. (2016) studied the Acceptance of HR Analytics in Organisations and found that employees of the organization believe this is important to the organization. It turns out that analytical skills are seen as an important factor influencing the size of a company. HR Analytic has not been widely used in small organizations. We know that if the technology used for analytical purposes is simple and simple, the organisation may accept it.

Research Objectives

1. To present a comprehensive overview of HR analytics.

2. To understand the challenges in the implementation of HR analytics.

Research Question

1. How HR analytics works?
2. What and how are organizational outcomes influenced by HR analytics, specifically increasing organizational effectiveness?
3. What are the challenges of implementing and using human resource analytics?

Research Methodology

This study is conceptual and descriptive in nature. The purpose of this paper is to report the findings of comprehensive overviews of HR analytics based on secondary data collected from various journals, research papers, and websites which helps to understand the concept of HR analytics, its impact on organizational effectiveness and also helps to understand the challenges in implementing HR analytics as a tool in organizations.

III. FINDINGS

1. How does HR analytics work?

Human resources analytics follows a pattern of information gathering and analysis that can help the organization generate crucial insights about its functions. In general, HR analytics follows a multi-step process to better understand workforce.

Data Collection

One of the first steps in HR analytics is collecting the necessary data. This data includes employee profiles, performance, high performers and high performers data, employee demographics, salaries, promotions, training, attendance, engagement, retention, and turnover.

This data is collected and analysed by organization's HR units to assess the effectiveness of critical HR practices such as talent management, recruitment, and training.

Typically, the data required to conduct workforce analysis comes from existing human resources systems. In addition, data can be derived from new data collection methods such as cloud-based systems. The data must be easy to obtain and fit into a reporting system.

The data collected also needs to be organized and sorted. In this way, companies can easily refer to the information provided for future purposes.

Measurement of Data

In this phase, companies will continuously evaluate and compare the data collected which is known as HR metrics. In order for this step to go

smoothly, some traceable information must be in place. A continuous flow of data is required so that HR can compare current data and evaluate changes. In order to follow the development of your data, you also need to have a comparison baseline. The three key metrics used by organizations to measure data are organizational performance, operations, and process optimization. Some common examples of HR metrics are:

- Attrition Rate – The rate at which employees leave their jobs after a given year of service with an organization.
- Absenteeism – Average days off and frequency of employee absenteeism.
- Recruitment costs: the total cost of recruiting and hiring candidates.

These metrics are collected over time and then compared to an acceptable rate established by the organization to evaluate its performance.

Analysis of statistics

The subsequent degree in HR analytics entails studying the statistics accrued and measured. This stage specializes in figuring out crucial styles and tendencies that could affect the company in long run. The analytical stage makes use of the statistics from the HR metric stage to look at how the statistics can assist in giving the HR perception of the company's modern operations and deciding areas of improvement.

There are 3 described techniques of evaluation –

1. Descriptive analytics

The kind of evaluation in which ancient statistics is used to recognize methods wherein operations may be advanced.

2. Predictive analytics

This kind of evaluation makes use of statistical fashions to expect destiny dangers and possibilities for the company.

3. Prescriptive analytics

This kind of evaluation makes use of the forecasts accrued through predictive evaluation and makes use of it to discover the outcomes of those anticipated outcomes.

Application of information

The last step of the HR analytics technique is the application of the information that has been collected, measured, and analyzed. This step requires organizations to make knowledgeable choices for the subsequent steps they should comply with to result in modifications in a certain area of the organization.

At this stage, organizations also can put in force new tasks and techniques in the staff which can

weed out the weaknesses and produce extra performance in operations.

2. What and how are organizational outcomes influenced by HR analytics, specifically increasing organizational effectiveness?

It's the responsibility of the Human Resources department to ensure that the employees are productive at their work and are being provided with a conducive environment. For this purpose, the HR department normally maintains a report of all their workforce. This pool of records is used to research the group of workers to offer higher insights and take advanced hiring decisions. From an organization standpoint, these huge records help organizations to manage their employees better and sometimes even enhance their overall performance to get a higher ROI.

In that way, HR will become the records collector and gather information concerning employees, hiring requirements, salaries, attrition, etc.

But HR analytics does not only collect records on worker efficiency. Instead, it pursuits to provide insight into every process with the aid of using collecting data after which the usage of it to take applicable steps to enhance those processes.

Improve hiring process:

HR analytics facilitates HR experts to make better choices based on historical data. Through HR analytics, the recruiter and hiring crew could make data-based hiring choices as a substitute than "trusting their intuition" or "gut" and hoping for the best.

An effective HR analytics tool can allow HR experts easily decide on the best applicants and hire them. Moreover, it additionally allows the recruiter to know more about the applicants via online databases, applications, social media profiles, activity portals, records, etc.

Improve Talent acquisition:

Structured recruiting techniques provides the insights required to cast a correct hiring net to construct a better pipeline. With the assistance of HR analytics, it's easier to identify whom to target for a particular position when a requirement arises in the company.

It is less difficult to recognize the kind of person required, the expertise required, alongside different aspects that is probably overlooked in a everyday expertise acquisition process.

When talent is scarce for a specific role, it'd appear that talent isn't there at all. The talent is there but

finding it would require to employ new strategies of attracting or attempting to find it.

Better Employee Insight :

HR analytics help the organization to observe a employee's professional life by tracking, sharing, and studying overall performance-related records. This is why organisations track and record the data of employee behaviour with customers,co-workers, and the way they spend their time.

Furthermore, the employees' overall performance records will be utilized by the hiring manager to hire outstanding talent. These recordsnot only provide insights about the employee but additionally shapes the techniques to enhance employee morale, retention, and engagement.

Reduced attrition Rate:

HR analytics can easily help identify and demystify the causes and patterns of employee attrition. It tells you why employees are leaving and why they are staying.

Reasons can range from poor performance, lack of skills, overwork, low pay, management issues, poor work environment, and more.

Understanding the exact reason why your employees are leaving your company earlier than expected can help you overcome the challenge and better connect with your employees.

HR analytics help to find gap areas where employees are struggling to achieve goals and objectives.HR managers can use various methods such as employee surveys, team evaluations, and exit and stay interviews to find out the reasons for leaving and develop strategies to keep them.

Better Training

Training and development is very important for the organisation's success. Gaps within the coaching method will increase costs to the organization and make unplanned challenges. numerous companies training programs, if not managed properly, will eat up an outsized chunk of a company's budget.

For this reason, firms are strongly suggested to invest in trainingby grouping massive information and learning from patterns. HR analytics will enable the organizations to get or implement correct training programs.It will facilitate firms to verify whether or not workers are creating the foremost of the opportunities and information provided to them throughout coaching programs and whether or not or not it's relevant to them.

More Productive Workforce

Since companies control the types of people they should hire for a job, it's easier to expect and better predict employee performance and productivity.

With analytics, HR managers gain an understanding of the workforce, and therefore knows what type of environment, policies, and teams drive them to work hard and optimize business performance.

3. What are the challenges of implementing and using human resource analytics?

Most organizations collect employee data in one form or another and use it to plan and transform their business structure. However, managing a company's HR data is not aneasy task. The use of analytics in HR operations has greatly simplified the work for HR professionals over the years. Analytics also helps organizations gaininsights and develop the ability to quickly and accurately model how employee trends impact sales and profits. However, there aredifferent obstacles that would prevent companies from realizing the full potential of people analytics.

1. Data quality problem:

HR analytics faces data quality problems as companies havehuge amounts of data that are not easy to collect, generate and store. The collected data may have missing attributes or wrong attributes due to lack of inaccurate data provided by employees. Duplicate data may be available or data may be affected when transferred from one source to another. The HR Analytics Tool generates results based on dataavailability, but if there are dataquality issues, the result may not be provided as expected.

2. Data Governance:

The organization lacks data governance when using the HR analytics tool. Data governance establishes the legality and ethics of data. It states that the data used by the company must be used in an ethical and lawful manner. And when companies use HR analytics tools, they can complicate data management as they use modern methods and techniques to collect and interpret massive amounts of data to make data-driven decisions.

3. Lack of data analysis skills

Although companies aggressively encourage the implementation of analytics in HR functions, the hard truth is that the analytical skills

of most HR professionals are limited. Most of them also require proper training to master the art of turning data into meaningful insights. This often makes the successful implementation of HR analytics in most organizations a difficult and complex task.

4. Insufficient IT resources

Implementing analytics in HR is an IT-intensive process. Many companies, especially smaller ones, do not have the infrastructure to set up an analytics program. In addition, building the necessary infrastructure for businesses can become a costly and time-consuming affair. This is one of the main reasons why many organizations refrain from implementing analytics in HR processes.

5. Variety of data

HR has a variety of tools for different services from different providers. In most cases, however, these tools work in isolation. This is proving to be a major challenge for organizations. To leverage people analytics positively, organizations must add these siloed systems, which in itself would prove a daunting task.

6. Employee Resistance

Companies are often criticized by HR professionals for relying on computers to perform HR functions, especially in cases like recruitment. They tend to think it takes the 'human' factor out of 'human resources'. There is also the possibility that analytical systems do not always accurately predict the correct results.

IV. CONCLUSION

HR analytics is a data analysis method in which employee data is collected regularly by the HR department and is then used to understand how the company can ensure its success of the company. It plays an important role in aligning HR strategy with overall business strategy and is a practical tool for companies to understand where

their strengths and weaknesses lie. HR analytics gains insights into employees to generate revenue for the company, reduce overall costs, correct risk, and determine each employee's contribution to implementing strategic planning. In this study, it is concluded that the implementation and use of HR analytics in organizations have been challenging because HR professionals may lack the necessary skills and knowledge to use HR analytics tools or there may be data quality or governance issues.

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