



HR Analytics – An Evidence Based HR Process

Dr Himani Sheth

Assistant Professor

School of Management Studies

LJ University, S. G. road, Ahmedabad - 382210

Gujarat

India

Abstract

The 21st Century Human resource Management is becoming more efficient with the best utilization of advancements in technology and automation of data. Organizations are now striving for much intelligent decisions right from finding a talent to retaining a talent. And the automation of data which in other words is known as HR Analytics has played an instrumental role in helping HR managers take intelligent as well as informed decisions. HR departments generally collect a vast data of their employees but many times it happens that the collected data remains unused and does not serve the purpose for which it is collected. HR analytics leads to the correct usage of this data and makes the HR department data driven. With the help of HR analytics the decisions can be taken based on numbers and logical reasoning rather than intuitions as it helps to convert data into information and information into insight. HR analytics if applied accurately to various functions of HR, can predict some really effective outcomes. In the mentioned context the paper aims to understand the concept of evidence based HR, concept of HR Analytics along with its importance, benefits and barriers and various types of HR Analytics. It was concluded that if HR professionals are equipped with the knowledge of analytics and if all the types of HR Analytics are practiced with utmost precision then an organization can overcome all the barriers to its implementation and gain a lot of benefits from this process and add on to its productivity as well as profitability.

Key Words: HR Analytics, HRM, Employees, Data, Analytics

1. Introduction

Rapid digital transformation has increased the requirement of HR analytics solutions and services and this has caused the world to grow fastest in HR analytics (Gurusinghe et al., 2019). Organizations today are trying to improve the accuracy of decisions while improving their efficiency and effectiveness through data analytics. HR Analytics is a data-driven approach to managing people at work. It revolves around analyzing people problems using data to answer critical questions about the organization thereby helping them to take informed decisions attract, retain and improve the employee performance. This method of data analysis takes data that is routinely collected by HR and correlates it to HR and organizational objectives. Doing so provides measured evidence of how HR initiatives are contributing to the organization's goals and strategies. For example, if a software engineering firm has high employee turnover, the company is not operating at a fully productive level. It takes time and investment to bring employees up to a fully productive level. HR

analytics provides data-backed insight on what is working well and what is not so that organizations can make improvements and plan more effectively for the future. (Andreev, 2023) As in the example above, knowing the cause of the firm's high turnover can provide valuable insight into how it might be reduced. By reducing the turnover, the company can increase its revenue and productivity. HR Analytics is a powerful tool that has a possibility of adding positive value to the functions of HR department H.H.D.P.J. Opatha (2020). The use of data in HR is generally referred as workforce analytics, human capital analytics or HR analytics and is popularly known as evidence based study. HR analytics leaders enable HR leaders to develop data-driven insights to inform talent decisions, improve workforce processes and promote positive employee experience. HR analytics doesn't collect data about how employees are performing at work, instead, its sole aim is to provide better insight into each of the human resource processes, gathering related data and then using this data to make informed decisions on how to improve these processes. HR analytics can track various metrics and KPIs for employee performance and engagement, such as productivity, job satisfaction, employee net promoter score (NPS), and employee turnover rate. With the ability to answer important organizational questions without any guesswork, it is not surprising that many businesses using HR analytics are attributing performance improvement to HR initiatives. (Andreev, 2023). HR analytics has now moved from being an operational partner to strategic partner (Malla, 2018) but this comes with its own challenges like non availability of good quality analytical and reporting software that can utilize the data collected, monitoring the data collected, limited access to quality of data, different management and reporting systems, lack of statistical and analytical skillset.

2. Literature Review

HR Analytics can be defined as “a methodology for understanding and evaluating the causal relationship between HR practices and organizational performance outcomes (such as customer satisfaction, sales or profit), and for providing legitimate and reliable foundations for human capital decisions for the purpose of influencing the business strategy and performance, by applying statistical techniques and experimental approaches based on metrics of efficiency, effectiveness and impact” (Lawler, Levenson & Boudreau, 2004; Boudreau & Ramstad, 2006). It is an important tool for the organization as it assesses the employee contribution to the organization, forecasts workforce requirements and links the workforce utilization to strategic goals to improve the performance of the business. (Kailash & Prathyusha, 2020). HR analytics provides a data-driven framework for solving workforce problems through analysing data with a combination of software and methods that applies statistical models and provides new insights for smarter decision making that allow manager to optimize human resource management. H.H.D.P.J. Opatha (2020). HR Analytics is also known as people analytics. It enables your organization to measure the impact of HR functions on the overall performance of the business (Kale, Aher, & Anute, 2022). It does not only focus on improving and investigating human capital elements like skills and knowledge, but it also applies analytical techniques along with HR data to keep a check on organisational strategy and enhance performance thereby. (Huselid, 2018). HR analytics process helps numerous organisations to earn a competitive edge over the competitors and also utilise the human capital to the best capacity. Masese and Uttam (2020). When organisations have high-quality data, the capability of analysing them and then the strategic ability to act accordingly, the organisations should utilize the value-added HR analytics (Minbaeva, 2018). Nowadays, HR Analytics is becoming an important instrument for success which uses the existing data for predicting the return on investment and thus giving a competitive edge over its competitors (Boudreau and Ramstad, 2005). HR analytics represent statistical and experimental techniques used to demonstrate the effect of HR activities on a firm's performance (Lawler et al., 2004)

3. Objectives of the study

- To understand the concept of evidence based HR
- To understand the importance of HR Analytics and the barriers to HR Analytics
- To understand the different types of HR analytics

4. Evidence Based HR

Organizations should focus on Human Resources as they are of prime value to the organization. Evidence based approach is the best way for an organization to make decisions. Evidence-based HR uses data, analysis and research to understand the connection between people management practices and business outcomes, such as profitability, customer satisfaction and quality. (Reddy & Keerthi, 2017). Just like evidence-based medicine and evidence-based management, evidence-based HR practice applies a family of approaches to support decision-making, typically building upon four sources of information: academic research findings, contextual circumstances, practitioner expertise and judgment, and the perspectives of stakeholders (Briner et al.2009; Relay et al.2009). HRM decisions are transforming from supervision, people instinct based decisions to proper evidence based decisions for promised results. Traditionally, HR has been defined in terms of persuading others to apply a certain initiative or HR programme (Boudreau and Ziskin 2011). However, often, there has been no clear view on the return on investment of these initiatives or programmes, while they take a significant amount of time, money and energy from managers and employees. Evidence-based HR, on the other hand, is defined more by education than persuasion (Boudreau and Ziskin 2011), allowing practitioners to make informed decisions. As per the Transformative HR model the five principles of evidence-based change are Logic-driven Analytics, Segmentation, Risk Leverage, Integration and Synergy, Optimization. (Boudreau JW & Jesuthasan, 2012). As HR has matured and gained stature within organizations, HR leaders have grown increasingly accustomed to rigorous human capital decision making based on metrics and analytics. However, next generation HR means going further, to truly embed analytical discipline and sophisticated systems thinking to create the kind of understanding that drives better strategies and better workplace outcomes. It is strongly believed that evidence-based change will take HR leaders to that level.” (Boudreau JW, 2012). KPMG International cooperative well demonstrated Evidence-based HR has demonstrated 7 steps trying to explain how HR Analytics work 1. Identify a business challenge 2. Develop your hypothesis 3. Understand your data 4. Analyse the data 5. Validate the data 6. Leverage the insight into business decisions 7. Continuously leverage an evidence based approach. Evidence based HR is beneficial in effective decision making, alignment of strategic goals of HR to the business goal, An improved credibility for the discipline of HR practice and for HR practitioner and effective risk management

5. Importance of HR Analytics, Benefits of HR Analytics and Barriers to HR Analytics

Human Resource Analytics is useful in analyzing each and every aspect of the organizational process in order to improve the performance and eventually increase return on Investment. (Kiran, Sujitha, Estherita, & Vasantha, 2023). HR analytics being a totally data driven approach helps the HR professionals to make better business decisions. It plays an instrumental role in predicting the performance of the employees and enhance their productivity. A data informed practice relatively reduces the need for the organizations to rely on intuition and to rely on correct and proper admissible insights for making decisions. It is a tool to measure the effectiveness of the employees, engagement strategies, and any new strategy that is intended to improve the overall efficiency and productivity. The availability of accurate and sufficient data , the HR analytics can root out strategic ideas in order to support decision making which is related to the organization’s human capital. HR Analytics not only drives best HR decisions with accurate evidence , but also provokes organizations to maintain adequate quality data for justifying ROI in HR investments. (Reddy & Keerthi, 2017). It often includes data visualization and automation so that once can automatically identify areas of weakness and plan the improvement accordingly (Kale, Aher, & Anute, 2022). HR Analytics practices are contributing to build a sustainable organization as these practices are balancing social, environmental and economic factors for short and long term perspectives (Kirtane, 2015).. As per Ben-Gal (2018) HR analytics has several goals 1) to gather and maintain data in a meaningful way for predicting short and long-term trends in the supply and demands of employees in different industries and occupations; 2) to help global organizations to make decisions relating to optimal acquisition; 3) to develop and retain of human capital; 4) to provide and organization with insights for effectively managing employees in order to achieve business goals quickly and efficiently; and 5) to positively influence the successful implementation of an organization’s strategies. According to Kiran et al. (2018); Bhattacharyya (2017); Kirtane (2015); Reena et

al. (2019); Reddy and Lakshmikeerthi (2017); Fred and Kinange (2015), mentioned are the benefits of HR analytics. Improves the performance of the employees, Improves ROI (Return on Investment) of human resources, Provides opportunity to assess how employees contribute to the organization and assesses the extent to which they can meet their career expectations, Forecasts workforce requirements and determines how to fill the vacant positions, Links workforce utilization to strategic and financial goals to improve business performance, Forecasts future HR trends and patterns in terms of various aspects (Eg: turnover, absenteeism etc.), Identifies the factors that lead to greater employee satisfaction and productivity, Discovers the underlying reasons for employee attrition and identifies high-value employees at risk of leaving, Establishes effective training and development initiatives, Assesses the information by using various HR metrics, Gives useful inputs for HR to predict the employees who can be upskilled to become experts based on data on employee performance, background education, discipline background etc. As the attributes of human resources are very difficult to measure and quantify, understanding and predicting the human behavior is a big challenge that every organization has to face today (Momin and Mishra, 2016). Due to the fact that human aspects are hard to measure HR managers face various challenges. To face these challenges HR analytics is introduced. However, performance of HR analytics also not easy as HR professionals have to face challenges when implementing HR analytics. According to Malla (2018) and (kaushik, 2019) HR analytics challenges are curating data, lack of data analytics knowledge and skills, privacy and compliance issues, lack of support from the top management, lack of access to real time workforce analytics, lack of HR alignment with business strategy, Multiple HR data bases with little to no integration, Outdated tools or technology, Analytics is not a priority for the organization, Lack of budget for HR measurement, lack of data about individual employee performance, Unsuitable organization structure

6. Different types of HR Analytics

HR analytics is primarily a communications device. It brings together data from disparate sources, such as surveys, records, and operations, to paint a cohesive, actionable picture of current conditions and likely futures. This is an evidence-based approach to making better decisions. This popular term is simply the gathering of primarily objective facts and secondarily related subjective data. (Reddy & Keerthi, 2017) Analytics is divided into four types i.e. Descriptive, Diagnostic, Predictive, and Prescriptive. These four types of HR analytics can provide HR professionals with valuable insights into their workforce, help them identify areas for improvement, and ultimately drive business success.

6.1 Descriptive Analytics: Descriptive Analytics is a statistical interpretation used to analyze historical data to identify patterns and relationships. Descriptive analytics seeks to describe an event, phenomenon, or outcome. It helps understand what has happened in the past and provides businesses the perfect base to track trends. The primary focus here is on cost reduction and process improvement. This is the foundation of your analytics effort. It includes, for example, dashboards and scorecards; workforce segmentation; data mining for basic patterns; and periodic reports.

6.2 Predictive Analytics: Predictive analytics is the process of using data to forecast future outcomes. The process uses data analysis, machine learning, artificial intelligence, and statistical models to find patterns that might predict future behavior. It's about probabilities and potential impact. It involves, for example, models used for increasing the probability of selecting the right people to hire, train, and promote

6.3 Prescriptive Analytics: Prescriptive analytics is a process that analyzes data and provides instant recommendations on how to optimize business practices to suit multiple predicted outcomes. It involves, for example, models used for understanding how alternative learning investments impact the bottom line (rare in HR). The process starts with the simple reporting of HR metrics and goes all the way up to prescriptive modeling of business practices. Although financial capital (cash) and economic capital (intangible assets) are the lifeblood of a business, it is human capital (people) that apply cash and leverage intangible assets to drive business performance. As you move from descriptive to prescriptive, the value add grows exponentially.

6.4 Diagnostic Analytics: Diagnostic analytics is a form of advanced analytics that examines data or content to answer the question, “Why did it happen?” It is characterized by techniques such as drill-down, data discovery, data mining and correlations. For eg: Employee absenteeism. If your absenteeism rate is climbing, you can use diagnostic analytics to find out why employees are missing work more often.

7. Conclusion

The business world today is more specific in optimistic utilization of resource. As Human resources are the prime valued sources of any organization, there is a high attention required to manage. There must be valid proof for HR decisions too. This evidence based approach in business surely paving a red carpet way for HR Analytics. HR Analytics is not only driving best HR decisions with accurate evidence, but also provoking organizations to maintain adequate quality data for justifying ROI in HR Investments. (Reddy & Keerthi, 2017). HR analytics allows you to calculate what employees needs or is lacking and then create a system or a program that will help increase the performance and retention rates. The HR professionals can definitely reap the benefits of HR Analytics if they are equipped with the knowledge of analytics and if all the types of HR analytics are properly understood and wisely executed. A properly planned and smoothly executed human resource analytics process will help the HR professionals overcome all the barriers to its implementation and help the organization achieve the highest level of productivity

8. References

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