



A study on analyzing the conceptual relationship between Human Resource Management and Human Resource Analytics

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ABSTRACT

Employee and worker insights are the most significant competitive advantage, according to research analyzing the volatility and uncertainty that is driving massive shifts in today's business environment. Human resource (HR) employees are increasingly required to grasp how HR analytics may help a company succeed. The aim of this research is to examine how HR may assist with this, as well as the role of HR analytics in the evolution of HRM in today's environment. The evolution of the "Future of HR transformation" and how it is transforming from the traditional "descriptive and diagnostic" to "prescriptive and predictive". This paper mainly focusses on the use of predictive analytics in emerging technological advancement in order to enhance performance and learn more about improvement in employee workforces. The finding of the study highlighted that there was a positive relationship between Human resource functions and HR analytics with the result of organizational development.

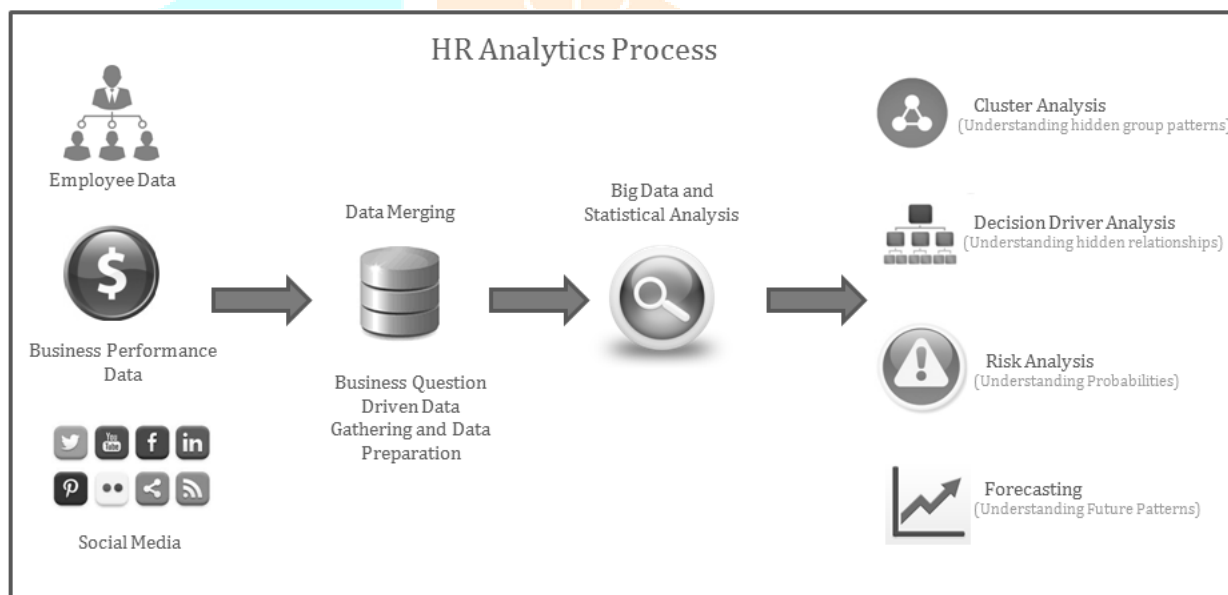
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Introduction

Human Resource Analytics is a subcategory of analytics that entails applying analytic processes to an organization's Human Resource Department in order to improve employee performance and, as a result, generate a better return on investment(Chattopadhyay et al., 2017).HR practitioners must shift from transactional or transformational HRM and towards strategic and long-term HRM(R & Kennedy, 2017). Sustainable HRM is a relatively phenomenon within management systems, due to which implementation of new methodologies are still developing stage.(Tabatabaei et al., 2017).The capacity of the people to use these technologies to understand how

they can be utilized, as well as knowing which tools to employ and when is critical to the success of HR analytics deployment.(Eriksen, 2016).

It's possible that the HR analytics function will be absorbed into a central analytics operation that spans marketing, finance, and HRM. People are an organization's most valuable asset and the most effective way of achieving a competitive advantage in today's uncertain market environment, yet managing people with diverse competencies and matching their outputs with the organization's strategy is a major challenge. To enhance decision-making, this involves the creation, analysis, and storage of massive amounts of data. Human resource management demands technologies that allow managers to get insight into the patterns that emerge from diverse HR operations, assisting firms in identifying star performers from a vast pool of employees. The application of analytics for the scientific and rational management of employee data and its correlation with organizational outcomes provides the solution. HR Analytics involves the use of statistical models to get insights into employee data, and the patterns revealed by the data allow for the prediction of employee behavioral patterns such as employee turnover, training expenses, and employee contribution to the organization is called Predictive analysis. (MOHAMMED, 2019). In 2025, HR analytics will be a well-established discipline with a proven impact on business performance and a considerable influence on operational and strategic decision-making. In addition, Integration will characterize the evolution of HR analytics, with data and IT infrastructure being combined across disciplines and even corporate boundaries. (van den Heuvel & Bondarouk, 2017)



Source from: Dr. Abdul Quddus Mohammed (2019)

Four types of advance analytics:

- 1. Diagnostic - Uses data analysis to determine why an issue exists.***
- 2. Descriptive - Analyzes historical data to understand about what is going on in a company's past and present.***
- 3. Predictive - Uses past and current data to forecast and construct models, helping companies to make future predictions.***
- 4. Prescriptive - Applies data modelling and forecasting to determine the expected outcomes of certain actions based on data.***

Review of literature

Organizations must develop new methods of working with a different set to achieve strategic objectives as a result of digitization, new technologies, and artificial intelligence.(Gurusinghe et al., 2021).According to the research, there is a need for more collaboration between data analyst and HR experts in terms of providing and analysing HR-related data for business decision-making. (Dahlbom et al., 2020). Professional social media platforms (PSMs) appear to be an effective human resource management (HRM) tool; however, in order to properly use PSMs, it is strategically important to combine research inputs from both employers' and employees' viewpoints. (Ruparel et al., 2020). Human resource analytics has emerged as a new corporate trend and challenge, emphasizing the strategic importance of HRM to senior executives.(Opatha, 2020)

HR analytics improves efficiency by better planning and utilising the personnel, and it also has a favorable impact on the company's culture.(Karmańska, 2020). The constraints of current information systems' analytical functionalities, as well as the methods in which analytics could be implemented using them, add to the difficulty of taking the next step for HR.(Dahlbom et al., 2020)

Workforce analytics faces numerous barriers in its adoption, and our study identifies a few of them, including a lack of data analytics capabilities within HR, weak IT infrastructure, and insufficient corporate investment. (Zeidan & Itani, 2020). BIG DATA intends to emphasize the uses of BIG DATA, its conspicuous features, and most significantly, its explosive capacity to revolutionize every sphere of life, particularly in the field of Human Resource Management. (Bragina & Molodchik, 2020). HR analytics has proven difficult to implement and use in the workplace because HR professionals may lack the necessary skills and knowledge to use the tool, or there may be data quality or data governance concerns. (Tomar, 2020). Human resource analytics, or a data-driven, analytical approach to human resource management, is increasingly becoming a fundamental part of organizational structures. (MOHAMMED, 2019).

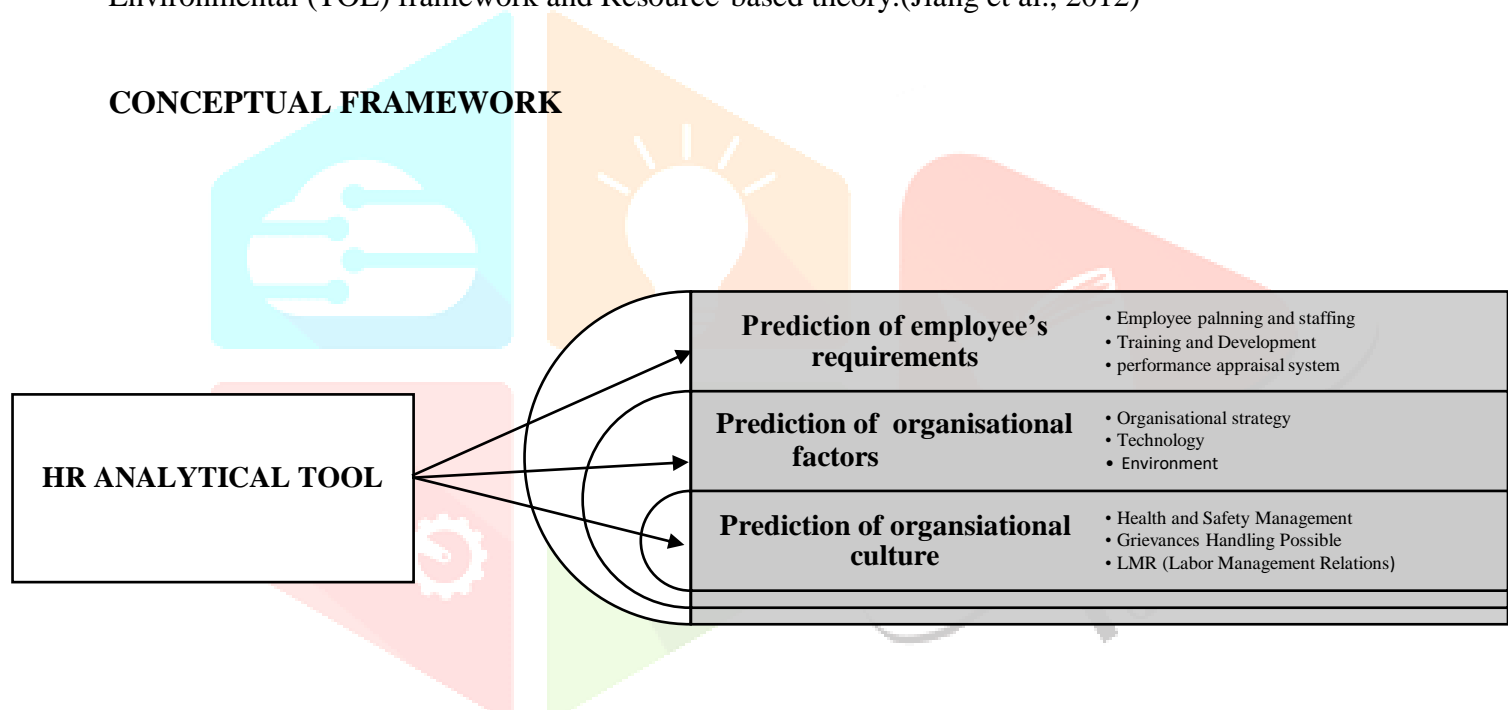
“In a world where we have more access to a broader range of data, including data about people and their actions, HR analytics provides a way to obtain better HR for less money”(Bartholin T & Aidan D, 2019). Talent analytics can save organizations money (in terms of data governance and ethics), and it also emphasizes the need of trust in ensuring the success of talent analytics programs.(Nocker & Sena, 2019)

The findings show that both technological and human barriers, such as using extremely basic HR processes and archaic information technologies, as well as low data quality, prevent modern human resource analytics from being used. (R & Kennedy, 2017). With the use of advanced data analysis tools, HR analytics was shown to be a possible answer for boosting accuracy and impartiality in the evaluation process. (Gurusinghe et al., 2021). Today's business world is more explicit in its resource utilization optimism. Human resources are one of an organization's most valuable assets, thus managing them requires a lot of care. Valid proof is also required for HR decisions. This evidence-based approach to business is undoubtedly paving the way for HR Analytics to flourish. HR Analytics is causing firms to retain appropriate quality data for justifying ROI in HR investments, as well as driving best HR decisions with precise proof. (Raghunatha & Lakshmi, 2017).

Organizations must plan for the future because strategic planning is required to secure the organization's overall performance. Without succession planning, no organization can be sustainable. Employers and HR practitioners are more aware of employees' attitudes in the workplace, and they can obtain a better understanding of the significance of employee attitudes on organizational success by gathering and analyzing Big data which is also gained from surveys. (Du Plessis & De Wet Fourie, 2016). Finding indications that HR Analytics has good effects was highlighted in the study, however adoption to analytics appears to be gradual. Because all innovations require a small group of early adopters, or if it implies that decision-makers do not believe or are unaware of the available evidence.(Marler & Boudreau, 2017). Future HR professionals need to be aware of issues such as fairness in decision-making and be familiar with the black box of algorithms, which, if used without proper precautions and

a thorough understanding of the inner workings of HRA systems, can lead to biased decisions or even violations of the legal rights of the personnel analyzed and managed depending on the outcomes. (Dahlbom et al., 2020). This research aims to determine the distribution of HR Analytics (HRA) throughout the HR function, as well as the barriers to adoption and the demands of HR professionals. The study also identifies the issues that impede HRA diffusion, which are primarily related to the literature on Diffusion of Innovation theory (DoI). The study also found out the General needs of HR professionals which are related to the subject. (Fiocco, 2017). The study investigates how HR Analytics aids in the enhancement of workforce performance in a business, resulting in increased employee productivity and, as a result, increased revenue production. With the advent of modern IT technology HR Analytics, the beginning of a new phase for Human Resource Management has arrived. As a result, HR analytics has aided HR managers in making strategic decisions that have helped them gain a competitive advantage over their competitors. HR Analytics has re-invented human resource management by aiding HR managers in making data-driven, fact-based decisions. (Weena Yancey M Momin, Dr. K Mishra 2016). To examine the linkages among the causes and outcomes of PHRA capability considering talent management under the moderating effect of an information driven culture, researchers used the Technological-Organizational-Environmental (TOE) framework and Resource-based theory. (Jiang et al., 2012)

CONCEPTUAL FRAMEWORK



Proposition 1: The usage of HR analytics is favorably connected to employees' requirements.

Proposition 2: organizational factors are positively related to adopting HR analytics.

Proposition 3: Analytical competencies of HR personnel are positively related to adopting HR analytics.

Proposition 4: The adoption of HR analytics is positively related to the firm's HR-business strategic alignment.

Proposition 5: The relationship between the adoption of HR analytics and the development of predictive HR analytics capabilities is significantly influenced by data-driven culture.

Findings

Review based findings for HR functions adopting HR analytical tool in organizational development

1. Employees' performance is improved as a result.
2. Human resource ROI (Return on Investment) is improved.
3. This allows you to assess how employees contribute to the organization and whether or not they are capable of achieving their career objectives.
4. Forecasts workforce requirements to determine how to fill vacant roles.
5. To improve business performance, link labour usage to strategic and financial goals.
6. Predicts future HR trends and patterns based on a variety of parameters (E.g., turnover, absenteeism etc.).
7. The characteristics that contribute to higher employee satisfaction and productivity are discovered.

8. Discovers the root causes of employee attrition and identifies high-value employees who may be on the verge of leaving.
9. Establishes successful training and development programs.
10. Utilizes a variety of HR indicators to evaluate the data.
11. Aids managers in making reasonable decisions.
12. The financial impact on human resource procedures is measured.
13. Analyzes job involvement, employee engagement, employee dedication, and other factors to determine who fits within the organization's culture.
14. It gives important inputs for HR to predict which employees can be upskilled to become experts based on data on employee performance, background education, discipline background, and other characteristics.
15. Human resource management as a discipline and its practitioners gain legitimacy.
16. Because HR executives can quantify their multiple influences on business outcomes, they will be included in strategic discussions.
17. HR departments, much like business or product leaders, can be held accountable for their impact on the bottom line.
18. Ability to justify human capital investments is improved.

CONCLUSION

During our research, by reviewing the literature, we discovered that Human Resource Analytics is a growing area with a wide variety of applications, notably in the corporate world. It reinforces the concept that data-driven decisions are more likely to be accurate. Despite the fact that Human Resource Analytics is not a new area or research field for establishing the scope of Human Resource Analytics, our research shows that scholars have done very little research in this area, with very little research carried out in India. As a result, there is a huge opportunity to conduct research to uncover the various HRA applications in India, numerous areas of analytics applications in the field of Human Resource management where ROI is highest, and the prevailing HRA scenario in businesses all over the world, particularly in India.

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