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HR Analytics and Its Impact on Organizations Performance

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ABSTRACT

In today's business world managing employees in organization is not a one-man task. With evolving business advancement in technologies managing employees and tracking their performance can be performed online with the help of Human Resource analytic tools. The use of Human resource analytics has improved employee performance and increased efficiency in business life, improvement quality of recruitment talent management employee productivity and decreasing employee turnover.

With the help of analytical tools the organization can recognize the issues like performance, employee turnover and retention employee behaviour etc, By using the data available with the organization. The use of human resource is undermined in many organizations but in this modern technological world various analytical tools have been developed which are used by huge corporation. In this paper we are going to see human resource analytics its tools and its application in different organization, such uses of human resource analytics in different organizations and how the use of human resource analytics helped the organization as well as employees in monetary ways and change the business strategy around people centric way.

KEY WORDS: Human Resource analytics, Human Resource analytics tool, Human Resource analytic metrics, organization

1 Introduction

Human resource management is focused on the effective use of people to achieve organizational and personal goals. It basically focuses on recruiting, managing, exit related functions in the organization. To keep employees fuelled and to keep the productivity rising human resource's evaluate employee performance and develop new training programs for them human resource came into light as a specific field in the early 20th century, inspired by frederick winslow taylor (1856 to 1915) john R. Commons an american institutional economist first used the term 'human resource' in his book 'The Distribution Of Wealth' that was published in 1893. However, it was not until the 20th century that human resource departments were formerly developed to manage the relationships between employers and employees.

Performance management plays a vital role in human resources as it is a continuous communication process between managers and achieve organizational goals and personnel skills of employees. This entire communication process involves specific expectations establishing goals

providing continuous feedback and examining results. Performance management builds a communication system between a manager and employee that is built Human resource throughout the year in hope of accomplishing organizational as well as individual goals. To understand employee managers go to though all the collected data and addresses the performance gaps Human resource through the given data. Various tools are used to gather such data like human resource analytics.

Human resource analytic is the collection and application of talent data to improve critical talent and used for decision making using the available data to predict employee turnover and identify better performers or predict skills that need to be improved. Human resource analytics is also known as people analytics. It enables your organization to measure the impact of human resource metrics on overall business performances and make decision based on the data.

Human resource analytics add value to the functions of human resource department and improve the effectiveness and efficiency of every associated aspects of it, to add value in the organization analytics is a

powerful tool that impacts human resource practices and policies and improve human resource functions. Analytics has interaction with multi disciplines like computer engineering science etc.

Human resource analytics can be defined as to understand relationship between performance of organization and human resource practices. In case of effective human resource practices it leads to employee satisfaction and provides strong foundation where decisions regarding human capital and business strategy can be performed. Analytics enabled organization bring precision in decision making. It is possible with the use of statistical techniques and experimental approach.

Human resource analytics tools comprise software that enables human resources professionals to gather, evaluate crucial metrics related to the performance and behaviour of personnel. These tools evaluate the influence of the human resource department on company performance by combining business data with data related to personnel. Companies may use human resource analytics software to identify inefficiencies forecast productivity and improve staff management processes.

2 Objectives

- ❖ To understand how human resource analytics helps in performance management.
- ❖ To study human resource metrics used to measure the effectiveness of human resource practices.
- ❖ To understand employee behaviour in the organization.
- ❖ To identify human resource analytical tools.

3 Research Methodologies

A secondary study has been done to understand human resource analytics data were collected and analyses from various research papers, articles, reviewed books and social media reports.

Human Resource Metrics Used By Organizations

Here are five commonly used human resource metrics that organizations use to measure the effectiveness of their human resource practices

❖ **Employee turnover rate**

The rate measures how many employees leave an organization over a given period, typically expressed as a percentage of the

total workforce. A high turnover rate can denote problems with employee retention, job satisfaction, while a low turnover rate may suggest a healthy and engaged workforce.

❖ **Time-To-Fill**

It is a metric that measures the length of time it takes to fill a vacant position, from the posting of the job opening to the offer of employment. This metric can help organizations to evaluate recruitment processes, identify improvement areas and assess the impact of external factors.

❖ **Cost-per-Hire**

Cost-per-hire is a metric that measures the total cost of recruiting and hiring a employee, including advertisement, recruitment expenses and other fees. This metric can help organizations to evaluate the efficiency and cost-effectiveness of their recruitment processes.

❖ **Absenteeism Rate**

This rate measure the percentage of employees who are absent from work on a given day or over a given period of time. High rates of absenteeism denote problems with employee morale, engagement or

workplace culture and can hurt productivity and organizational performance.

❖ **Employee Engagement**

It measures how committed and satisfied employees are with their work and consider organization as a whole. This metric is measured through employee surveys or other feedback mechanisms and can provide valuable insights into areas where the organization can improve its human resource practices.

4 Types of Human Resource Analytics

❖ **Descriptive analytics**

Gathering raw data doesn't make sense and isn't always useful but once it is sorted and put in a systematically order it can be useful. It is also known as observing and reporting is the most basic type of analysis and is most likely used. It collects all the historical data available summarizes it into something understandable. A headcount of employees or some specific department in the organization would come under descriptive analytics. More

complicated metrics like turnover rates also come under descriptive analytics as well as. They study the past data and aim to explain what happened

❖ **Diagnostic analytics**

If descriptive analytics tells what happened then diagnostic analytics tells you why it happened. We go beyond what is happening to searching for why it is happening. Here you make an observation identify the descriptive analysis and move forward with the diagnostic analysis. It uses various techniques including data drilling and data mining. To investigate the root causes of problems and find their solutions companies need to understand why the problems are occurring.

❖ **Predictive analytics**

As descriptive analytics relies on the past data or looks backwards predictive analytics looks forward. Various statistical models and forecasts are used in these analytics to predict what could happen. The goal of this analysis to find the needs of the organization. Models are built on the patterns that were found on descriptive analytics. It could help predict how long the employee is going to last in

the organization or it can help the talent acquisition team determine if the employee is a good cultural fit for the organizations.

❖ **Prescriptive analytics**

After the future is predicted, the next question is what can be done about the situation. Prescriptive analytics provides recommendations on what to do based on the prediction and the old data given. This analysis is most useful for organizational with seasonal demand, prescriptive analytics could also help determine how to properly hire a new employee based on the required skills and knowledge and across the employee life cycle. All the information available on the above levels and prescribe what should be done. The data shows what will happen further.

Human Resource Analytical Tools

Human resource analytics tools help translate people data, such as demographics, skills and pay into actionable insights which support organizational decisions about the talent needed to create a competitive advantage. If the analytics tools are human resource specific they can

capture insights from unstructured data such as employee aspirations and experiences and provide predictive analytics to the guide talent decisions.

❖ **R**

R is the most used human resource analytics tool. R is great for visualization & statistical analysis is well-suited to explore massive data sets. It enables to analyze and clean data sets with millions of rows of data and visualize the data and analysis. R-studio is a data analysis and visualization software tool which can be applied for very large data sets.

❖ **Python**

Python is one of the programming language and can be used interchangeably used with R. When it comes to statistics R is better at doing statistical analyses has a more active community and is better suited for visualizations. Python has slightly less functionalities but is easier to learn. For artificial intelligence and machine learning applications Python has become the most popular programming language.

❖ **Excel**

Excel is where most of us started. Whenever you manually extract data from any of your human

resource systems. Files can easily be opened and edited using excel. The spreadsheet standard is one of the best options for translating complex data into a form that is immediately understandable to finance teams.

❖ **Microsoft power BI**

Microsoft power BI is the clear market leader in business intelligence tools, with extensive and well-documented integrations into every major human resource application, it also provides numerous ways of analyzing, presenting and visualizing data. It works quite seamlessly with excel and can improve communication across the business. Power BI is also supported by various third-party human resource dashboards, analytics tools and consultancies.

❖ **Tableau**

Tableau is very similar to Power BI in that it enables the aggregation and visualization of various data source, it is a good choice for teams looking for powerful visualization features and who want to explore human resource data in various ways.

❖ **Visie**

Visier is a data aggregation service which helps to answer questions

about the workforce. It also enables you to answer questions about what drives performance and productivity and different other human resource outcomes. Visier offers a solution which helps to come close to out-of-the-box people analytics.

❖ **Qlik**

Qlik aggregates data the main difference is that visier focuses on actionable insights on workforce data. Qlik is a more general data aggregation tool with extensive dashboarding capacity which means Qlik is very suitable for more general data warehousing, aggregation, and dashboardings.

❖ **SPSS**

SPSS is commonly used to actual analyze of data. SPSS is one of the most commonly used human resource analytics tools in the social sciences. It is user-friendly interface. It helps to analyze data without having extensive statistical knowledge. Because SPSS is often used in the social sciences, a lot of human resource professionals know how to use it especially the ones interested in data analysis

❖ **CPLEX Optimizer**

A whole different set of analytics tools are made for optimization,

these are often used to do prescriptive analytics. Prescriptive analysis is dedicated to finding the best course of action in a given situation. This is a good choice when the human resource team is tasked with a major shift in headcount such as growing into a new market, opening a new facility, or launching a product

❖ **ChartHo**

ChartHop indicate people analytics software intended for companywide use, to facilitate broader planning and allow feedback across teams. It was designed from the ground up to make it easy to surface various kinds of analytics for common human resource problems and questions. It includes modules for performance management compensation, headcount planning and employees experience.

Benefits of Human Resource Analytics

- ❖ Human resource analytics through its predictive analytics helps in exposing the defective practices that turns out to be the key cause for weakening, which helps in

retaining and maintaining high performing employees.

- ❖ It helps displaying the results and how they were accomplished.
- ❖ Human resource analytics help in human resource planning.
- ❖ It helps forecasting about employee needs and skill-set for achieving organizational objectives.
- ❖ It helps in sourcing the best potential organizational talent requirement for specific positions without bias.
- ❖ It helps in getting better performance results in organization through quality decisions especially in talent acquisition.
- ❖ It helps in pointing out important performance part which may have high impact on the organizational performance.
- ❖ Human resource analytics tools often include data visualisation and automation so you can to automatically identify areas of weakness and plan the skills required of the team frame a program for the skills required.

5 Conclusion

The human resource department is considered as a value-added business partner to the organization. The organization address the questions like ‘why do employees should stay with our company?’ Human resource 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. Companies like Google uses human resource analytics to collect employee performance data to determine the most effective training programs to help both high and low performing employees.

Human resource analytics and other unrecognized organizational methods that are related with human resource analytics are ignored by many organizations. The study focuses on how human resource practices could be used to change traditional roles to transformational roles in organizations. The study tries to explore and understand the role of analytics in this modern era. Increase of expectation in performance has put the focus on human resource analytics to create a new innovative and competitive world at work. Human resource analytics ensure lean

and agile organizational structures that are based on an optimal combination of individual traits, skills, competencies and strategic business targets.

To execute the role effectively, human resource managers and leaders need considerable support from their organizational leaders. First, they need to be able to go in-depth of the problem.

These problems can come from various issues and experts in the areas such as change in management, leadership development, staffing and metrics and human resource analytics, can help analyse the situation and provide possible solutions for these problems.

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