EMERGING TRENDS IN HUMAN RESOURCE ANALYTICS IN UPCOMING DECADE

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Abstract—**Human Resources Professionals in many companies have shifted to become data-driven organizations where every decision at operational, functional and top levels of an organizational hierarchy rely on data to make decisions. The decision-making style based on mere intuition has vanished due to the emergence of data which directed the organizations to achieve their objectives efficiently. There are drastic changes taking place in the field of Human Resources and everyday HR managers learn something new. With rapid and dynamic changes in the field of science and technology, the emerging use of artificial intelligence and growth in the gig economy, the perception of Human Resource Analytics has changed over time.HR professionals with the help of data make decisions which enable to attract, retain and improve the employee performance. An organization can sustain in the long run only if it keeps itself updated with the latest trends happening in the field of HR Analytics. By entering into new decade there is a need to understand what transformations happening around the globe and the implications it will have on organizational performance. This is a descriptive study which focuses on trends in Human Resource Analytics and how it shapes the organization to perform better in the upcoming years.**

Keywords—*Human Resource, Analytics, Strategies, HRM*

I. INTRODUCTION

The term HR analytics refers to an area of analytics which involves activities like analysis of people and involves using analytical processes to human resources of the organization to improve the performance of employees as well as aims at reducing employee turnover in the organization. When companies invest in Human Resource Analytics the companies get a better return on investment due to data-driven based decision making. There are 5 major types of Human Resource Analytics which every human resource manager should be aware of are as follows

- **Employee Churn Analytics**: Employee Churn Analytics refers to estimating the employee turnover ratio. It also involves an assessment of the workforce.

This involves the collection of historical data which helps to predict the future and specifies employee turnover rate from the time employee joins the organization.

- **Capability Analytics:** Capability Analytics involves sourcing, recruiting, training, retaining and promoting expertise who helps in achieving organizational goals with the help of established competencies.

- **Organizational Culture Analytics**-Organizational Culture Analytics refer to collective unspoken rules, systems, and patterns of human behavior which creates a specific culture for any organization.

- **Capacity Analytics**-Capacity Analytics majorly emphasizes on the operational efficiency of the workforce. It involves a behavioral analysis which seeks to determine the capacity as individuals are required to grow.

- **Leadership Analytics**-Leadership analytics plays a pivotal role in establishing leadership to improve leadership performance. The thrust area where this kind of analytics is applied to employee retention which requires great caution in every organization. The data is collected through methods like survey, polls, focus groups and ethnographic research.

HR analytics is closely associated with predictive analytics which is one of the most important forms of big data analytics.HR predictive analytics is one of the major game-changers in the industry that helps to maintain good network relations between employer and employee before encountering any kind of problem. This method involves processing unstructured data and deriving vital information about the organizational context and which may be used for day to day decision making. With the help of HR analytics companies gain useful insights which vital for every HR professional. Some of the essential details provided with the help of HR analytics are:

- Current Employee Turnover Rates.
- Numbers of employees who are likely to leave the organization
- Salary estimation for new functional roles created in an organization
- Predicting the performance of newly recruited employees.
- Measuring Financial Impact on Human Resource Practices.

The predictive analytics is a useful tool to every HR professional to direct the organization towards its growth. These tools do critical evaluation of assessing the employees before recruitment and during the employee's tenure in the organization which makes a significant contribution towards an organization's bottom line.

Predictive function in HR analytics can be used to make various predictions like employee's cultural fit, employee engagement levels, upskilling ability, staying in line with industrial rules and regulations. This method also involves assigning a score to different HR functional areas and providing an explanation for the likelihood of an event to happen.

II.   IMPACT ON COMPANIES PROFITS THROUGH HR PREDICTIVE ANALYTICS

Based on an interview with the HR Technologist, Arjun Pratap, CEO of Edge Networks, it can be inferred that with the help of predictive analytics it is possible to make immediate decisions and also forecast the future requirements for the organization. It helps to achieve those objectives of the organizations' which cannot be achieved through the manual method of decision making. The major impact on a company's profit through HR analytics are as follows:

- **Determining the individual who fits into the culture of the Organization-**Predictive analytics helps to identify the employee profile who is both person fit and job fit for the organization. The data which helps to determine the person fit are engagement, major contributions in terms of teamwork, attrition rates, growth predicts how they align the individual with organizational goals. The CEO of CEIL HR Aditya Narayan Mishra suggests that there are major transformations which are happening in recruitment and an employee's demographic details and their performance and behavior can be correlated to determine the success factors.

- **Upskilling vs Hiring-** HR analytics use an algorithm which predicts what are the skills and various other resources which are essential but the organization

does not have access to those core operational resources. Data based on employee performance, background education give useful inputs for the HR's to predict the employees who can be upskilled to become experts. Furthermore, it helps the organization can fill talent gaps instead of spending a lot of time in recruiting new hires and training them till they fit into the organization and it helps in lowering costs related to recruitment.

- **Employee Turnover Rates-**Employee attrition rate is the most challenging aspect of people management. Predictive analytics helps to overcome this challenge to a larger extent by identifying employees who are in larger risk of leaving the organization. By understanding the promotion offers, environment, employee-employer relations it helps us to understand who is interested to become the part of the organization. This helps to save the company from incurring huge losses in terms of employee turnover rates.

- **Employee Contribution to Business Outcomes. -** Predictive analytics makes use of metrics to understand where the organizations can improve and indicate the employees who have greater chances of being part of the improvement. This is a major concern for the organization because human capital is one of the major investments of a company who can mold the company to achieve its strategic objectives. With good employees, no companies can survive in the long run.

HR analytics is a major trend in the field of Human Resource Management and which meets the requirements of the business to obtain a positive outcome. Technology is dynamic in nature and today's technology may not be relevant for the future performance of the business. One classical example to understand the importance can be inferred from the business operation of Nokia which was a leading company in 2000 with the greatest market. When Nokia's competitive companies introduced android technology Nokia continued to operate with existing technology and unfortunately went into the decline stage in the product life cycle. This applies to every aspect of the business because they are typically technology-driven and the further section of this article describes the major trends happening the field of HR analytics in the upcoming decade.

III.   MAJOR TRENDS IN HR ANALYTICS

Implementing new technology into the organization helps to improve the existing processes. This calls for a new way of understanding data in terms of collection, processing and reporting the data so that companies use them for core

decision making activities of the organization, some of the major trends in HR analytics are discussed further.

- **Automated Recruitment-**In automation recruitment it involves gathering of data who fits well into the organizational culture. It makes use of Artificial Intelligence filter out candidates who does not match with the company profile. It also includes major tasks like job advertising, tracking of applicants, prescreening the candidates, social recruiting, rediscovering candidates and ranking them.

- **Selecting New Hires Through Artificial Intelligence-**Artificial intelligence analyses the data and helps the HR managers to hire candidates who fits into the organization. Decisions are taken without any bias. For example, Chabot's helps to automate important tasks, takes care of all customer and marketing related activities as well as talent acquisition activities with the help of NLP (Natural Language Processing).

- **Interactive Training of Employees -**Interactive training involves virtual training for existing and new employees. This involves the use of major techniques like becoming tech-savvy, develop ground rules, focus on agenda, collaborating and interactive learning sessions with trainees. This is an effective method to engage the trainees.

- **Emergence Of Predictive Reporting-**Predictive reporting makes use of determining the factors like attrition, its implication and how to curb these issues. It is really useful for the companies to use the data which is applicable to the entire organization. This is mainly used in financial modelling, social media analysis, insurance, risk management and retailing etc.

- **Employee Engagement. -**Employee engagement was one of the latest trends in 2019 and has ever wider scope in the upcoming years. The companies seek to get good feedback from employees and understand how to increase engagement levels in the organization. There are many companies who have been successful in investing in high employee engagement practices. Some of the major companies who have been successful with this tool are:

1. **Google-**Google functions in a transparent manner by encouraging creativity and collaboration and they try to eradicate barriers for their employees. Google allows its employees to spend 20% of their activities of their area of interest

2. **HYATT**-Hyatt hotel group has good history of retaining their employees through promotion at all

levels and employees listen to problems faced by each other and provide suggestions for the same.

3. **South West Airlines-**Southwest airlines aims at connecting with their people and they have great concern for their customers and employees equally.

4. **Virgin-**Virgin is known for their listening and encourages healthy brainstorming and debate sessions and values opinion of each and every employee.

5. **L'Oreal-**L'Oreal engages their employees through their volunteering activities called Citizen Day. This program consisted of 27,600 participants and 170,000 volunteer hours across 63 countries, this event supported 855 organizations in 2018.

- **Increase in Need of Performance Measurement**-Organizations stopped using the methods of once a year assessment of employees in order to maintain skill workforce and greater productivity. 200 organizations across the globe have invested in CPM tool (Continuous Performance Measurement) which is a continuous streamline processing to understand the flaws in their operations and take immediate action if required. In a feedback system since the review is one only once a year, there are chances of missing out a value points which are important to an organization's function.

- **On the Job Training-**On, the job training methods involve continuous training and development of the workforce that helps in skill-building and overcoming resistance to change. Some of the major techniques which would gain more popularity are

1. **Augmented Reality-**It is a set of digital elements which help assess how an individual is suitable to an organization by providing a practical situation to employees and asking them to respond instead asking conceptual questions
2. **Gamification -**It involves non-game scenarios relating to business environments and processes mainly used in recruitment, training and developmental activities.
3. **Geo-Fencing-**It is an effective method of location-based attendance tracking of the employees. In simple terms, it is a method to track the employees and can have control over the movement of the employees.

HR professionals need to focus on adopting strategies which are important for them to follow up with these given trends.

The next sections give a brief idea of strategies to be used for getting updated with the technology.

IV.   MAJOR STRATEGIES FOR THE FUTURE OF HR

SHRM, Society of Human Resource Management suggest that HR professionals need to focus on various levels of business strategy and of course emerging trends in analytics. The role of HR managers has changed from time to time due to rapid change in technology, economic variations and changes in demand and supply etc.

Position	Employment, 2016	Projected Employment, 2026	Change in Employment
Human resources specialists	547,800	586,700	+7%
Human resources managers	136,100	148,800	+9%
Compensation and benefits managers	15,800	16,600	+5%

Source: U.S. Bureau of Labor Statistics.

Based on the Bureau of Labor Statistics in the US, more number of jobs will be created but there is going to be a cut-throat competition. Individuals with a master degree are likely to reap the benefits for C-suite positions. Some of the critical strategies are as follows:
Use analytics and keep updated with the existing technology as firms are becoming more and more competitive.

1. Human Resource professionals need to understand how to contribute to the vision, mission and organizational objectives. There are various opening available in the field of HR like
    *   HR data scientist/chief technology officer.
    *   Employee experience specialist.
    *   Head of talent-acquisition technology selection
    *   Head of the candidate experience.
    *   Performance coach.

2. HR managers integrate into consultancy roles which are really important in employee engagement and retention.

3. It must be understood that not just the Millennial's more and more gig workers will be employed who would have higher levels of creativity.
4. Companies must invest in employee activities like caregiver leave, expanded fertility benefits, gender reassignment and transformation assistance, financial wellness programs etc.
5. HR professionals must seek to obtain professional certifications like PHR SPHR.SHRMCP ensures to keep skills updated.

V.   CONCLUSION

HR analytics is the most emerging field in HR. Without data it is impossible for organizations to function. There is a rise in HR professionals who are competitive in the digital era. There is a constant need to motivate recruit and train employees. Technology enables helps the HR professional to gets adjusted with the changing workforce and enabling them to perform better. The power has analytics has grown so strong due to the benefits it offers to the companies. This study gave an overview of what is HR analytics, how HR managers use predictive analytics to do HR function, the major trends in HR and the critical strategies or factors the companies must consider to survive in the market. This explains why organization depend data for decision making.

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