HR Analytics
Methodical Measurement of HR Processes

Udhay Kailash
Assistant Manager HR, Aurobindo Pharma Ltd

M Prathyusha
HR Practitioner

Abstract:- In the recent times there is growing need for measuring and managing of Human Resource processes. This can be the result of strategic business value Human Resource function is been given in the organizations. This led to introduction of HR Analytics to prove HR process efficiency & Efficacy.The use of HR analytics has proven successful inimproving company performance by reducing workforce costs, improving the quality ofrecruitment, improving talent management and employee engagement, and generallyimproving productivity. It had become as important decision-making tool supporting the HR processing with supporting data. This paper is a qualitative study with MNC Pharma organization. This study explores the extent of the usage of HR Analytics for predictive decision making in the organization and discusses about how HR digitalization paved way for HR analytics. This paper also discusses different HR Analytics widely used and how they are useful for decision making. Different definitions of HR Analytics are also mentioned as part literature review.

Keywords:- HR Analytics, HR Processes, People Analytics, Decision Making, HR Digitalization.

I. INTRODUCTION

Over the last few decades, researchers from different fields have been interested in measuring the value and performance of HR activities in the attempt to provide the HR profession with tools to improve decision making and strengthen its link with other organisational areas, often involving applications of mathematical and statistical models (Becker, 1964; Fitz-Enz, 1984;

Cascio, 2000; Becker, Huselid& Ulrich, 2001; Toulson &Dewe, 2004; Lazear & Shaw,2007; Schwarz & Murphy, 2008; Gabcanova, 2012). The HR function seems to be undergrowing pressure to demonstrate its value (Holbeche, 2009), and recently these subjects havebeen funnelled into a new concept or discipline (Marler& Boudreau, 2017), which representsone of the main contemporary trends in HR strategy and decision making (Falletta, 2014;Deloitte, 2015): HR Analytics (HRA). The notion of measurement in human resources can be traced back to theearly 1900s (Kaufman, 2014) and the first book on 'How to Measure HumanResources Management' by a pioneer in the modern era of HRM measurement,Jac Fitz-enz, was published in 1984 (Fitz-enz, 1995).The use of analytics in HR is in its initial stage and is limited to managers using descriptive analytics to collect and report activities instead of outcomes (Pape, 2016).

In our study of HR Analytics, we identified the strategic value of HR processes can be displayed through HR Analytics. We also identified that there is an increase in demand to measure ROI of HR processes and practices implemented. HR Analytics today is targeting critical workforce metric that link workforce strategy to business results that finally provides HR a seat at the table and the integrity to make business and workforce strategy decisions by identifying cost savings opportunities, improving the retention of key talent and increasing workforce productivity and efficiency (Higgins J., Cooperstein G and Peterson M, (2011). Organizations that are capable of leveraging in data driven decision making for the workforce not only outperform their contenders, but also profit higher value to shareholders and be in a better placed to meet workforce and business demands for the future.

The introduction of HR Analytics starts with identifying what to measure and how often can it be measured. Identification of key metrics in each process implemented is the key to achieving the goal of measuring the efficiency. Most of the organization follows LAMP which stands for logic, analytics, measures, and process in identifying the analytics. The identified metrics need have enough data recorded to analyse and produce strategic level decision making process. For this to happen organizations completely digitize their HR processes. This will enable organizations to generate live data and project them on dashboards for analysis at specified timelines. With the introduction different platforms like R, Google Data Studio, Power BI tools the analysis of the data became more realistic.

With Pharma industry being people centric industry, it is very important and decisive for HR department to use HR analytics for various HR practices. In our study we had picked India's second largest Pharma organization which is established in terms of their HR practices. The processes and practices are digitized, allowing them to collect and analyse the data. HR Analytics are well developed with use of analytic tools like Tableau and Google Data Studio, they moved from descriptive analytics to predictive analytics in a span of 2 year.

We had analysed the analytics used by the organization and the process efficiency it brought in decision making. This study also revealed how the analytics

have a role in controlling employee turnover and other HR practices where informed decision are taken. We had identified the HR analytics used by the organization and the decision points which are answered using the analytics.

Research Questions & Objectives

The following are the questions framed study the HR Analytics in the Pharma organization
1) What are the HR metrics which are chosen under different HR practices?
2) What are the questions answered by the HR Analytics?
3) What are the results of these HR Analytics?
4) Different tools used and future developments

On thorough research with the help of their dashboards and tools they are using for HR Analytics we were able to answer the above five questions and suggested how these can be implemented in other organizations of similar kind.

II.   METHOD

This research paper is qualitative study of the HR Analytics in a case organization (Pharma Organization). This study is conducted through the available resource at the organization like the Dashboards, tools used for HR analytics and by interviewing few team members of HR Analytics department. A comprehensive literature survey is conducted through available scholarly articles and by using desk research.

HR Analytics:

HR Analytics is defined as "HR analytics is an integrated process that improves the individual and organizational performance by assisting to improve the quality of people related decisions. HR analytics mostly depends on statistical tools and analyses and requires high quality data, well-chosen targets, talented analysts, leadership, as well as broad-based agreement that analytics is a legitimate and helpful way to improve performance." - Kirtane (2015)

"HR analytics is the systematic identification and quantification of the people drivers of business outcomes" - (Heuvel &Bondarouk, 2016).

The different HR processes and Metrics captured are listed below from the Pharma organization are listed below process wise

Talent Acquisition: Considered to be most strategic and import function of the HR department and organization alike, most of the HR Analytics are focused on Talent Acquisition process.
- TAT (HR TAT: No of Days from Job Opening to Offer Issue, Business TAT: No of days from Job Opening to Onboarding of candidate)
- Offer to Joining Ratio
- Vacancy to Onboarded ratio
- Average Cost per Hire
- Attrition/ Employee Turnover rate

These Analytics are quite essential to measure and manage the Talent Acquisition process as Pharma industry is more of human capital oriented and employee turnover and recruitment are two continuous processes.

Compensation & Benefits Management: the important key metrics which are reviewed at C-Suite level are the C&B metrics which are defined as follows
- Overtime Cost Analysis/ Unit
- Monthly & Annual Outflow Analysis
- Per Capita Productivity report
- Fringe benefit cost (Statutory & Non-Statutory)
- Salary cost as percentage of total manufacturing expenses
- Compensation Benchmarking

Participation in external benchmarking surveys enabled the organization to get key metrics required for C&B enabled through dashboards.

Performance Management: Measuring Performance of employees is recognized as only one side of the Performance Management, the continuous tracking of performance through different analytics is the way to enhance employee performance. Our study revealed some of the metrics which support HR to measure employee performance regularly.
- Employee Induction & Integration Metrics
- KRA's & Performance Standards for New Joinee
- Induction program engagement analytics
- Performance Measurement & Accountability
- Halfyearly Performance Feedback System metrics with Dyadic Feedback process
- Employee KRA's modification/ Course correction metrics,
- Annual Performance Management System metrics:
- Performance Rating & Feedback
- Talent Curve Distribution
- Career progression & promotion
- Employee wise Ageing Analytics for promotion
- Top Talent review with unit/ Department
- Performance Improvement Metrics

The performance management metrics not only measure the performance but also measure engagement levels of employees and improvement metrics.

Rewards & Recognition: As part of employee engagement and productivity enhancement Reward & Recognition is majorly focused area. This require to be supported with metrics as rewards comes with performance.
- Ideas generated per employee & Ideas Generated per Unit, Net worth of Ideas implemented. (Metrics as part of Idea Management System)
- Talent of the month process adherence and performance of employee metrics
- Quarterly organizational Value Framework (UttamVyavaharPurashkar) based rewards
- Budget Utilization for Rewards
- Instant R&R program process metrics

- No. of Rewards per Unit/ Department

Tracking of the Budget utilization is unique metric which was tracked by the organization which will enable to reward more performers throughout the organization.

Employee Grievances: Employee satisfaction is result of grievance resolution in time and convey the same to employee about the resolution. The below metrics helps in tracking the grievances and increase employee satisfaction rate

- Grievances received to Grievances resolved ratio
- TAT time in resolving Grievances

Employee Retention/ Hi- potential retention: The high rated performers need to be tracked and provided with Learning opportunities for further development. Some of the metrics we identified as part of the organization study are as below.

- Top Talent retention
- Employee retention percentage

COVID 19 Pandemic specific HR Metrics: During our interview and research study with the case organization we had identified few important metrics which are used by the organization during the pandemic. Continuous tracking of the situation is important to be cautious and take appropriate measures.

- Medical Dashboard
- Post Lock-down Implementation Compliance Scorecard
- Employee Self Declaration Mobile Application (AuroSetu Registration & Compliance)

Once we had information on the metrics used by the organization, we then tried to find the questions which are answered by these metrics. Below are the HR processes and the questions posed with respect to the metrics.

Table 1: HR Processes and Questions Answered with metrics

HR Process	Questions Answered with Metrics
Talent Acquisition	How fast is my Manpower available? How many days it is taking to find a replacement? What is my Turnover rate and what is my recruitment plan for the same? What is cost of my recruitment?
Compensation & Benefits Management	What is productivity of each employee? What is the employee contribution to the profitability? How much the organization spending on over time and reasons for the same?
Performance Management	What are the performers to non-performers ratio in the organization? How well is the talent curve implemented in the organization? What is Promotion ratio in the organization? What is age group of the employees among the promotions?
Rewards & Recognition	What is the budget allocated vs utilization for the Rewards & Recognition? How well are these programs getting implemented? What is the benefit for the organization with these programs?
Employee Grievances	How fast are the grievances resolved in the organization? How are the employee satisfaction rate in organization?
Employee Retention/ Hi- potential retention	How many top talent are identified in organization?
Diversity & Inclusion	What is the diversity ratio in the organization?
COVID 19 Pandemic specific HR Metrics	What is the infection rate in the organization? What are the preventive measures taken to avoid the situation?

The results of the HR Analytics are analysed with the help of data from different unit location of the pharma organization. They are tabulated as below. The same analytics are presented to top management and key decisions with the support of analytics.

Table 2: HR processes and Results through HR Analytics

HR Process	Results through HR Analytics
Talent Acquisition	The productivity of the Talent Acquisition team is improved in terms of making available of right talent in line with demand apart from pruning recruitment time. The Turnaround time is reduced from 20 days to 7 days per hire for niche positions. Average Cost per hire (ACPH). It is optimized as close to 10% in 2019-20 viz-a-viz 2018-19.
Employee Contribution	Employee contribution towards revenue and profit are analyzed with different ratios presented to Top Management and with the help of initiatives taken on due analysis, contribution per employee towards profit is increased by 14%
Rewards & Recognition	Process adherence is increased from 85% to 95% and budget utilization increased to 90%.
Employee Retention/ Hi- potential retention	Top Talent retention is increased from 94% to 97% and a comprehensive PMS Dashboard is generated to analyze some of the important elements of PMS.
Employee Turnover	Attrition is been reduced from 8.5% to 7.8% as it is displayed and discussed through Attrition Dashboard

Customized tools are used to analyse the data collected from different locations and different processes. The major tools are Tableau and Google Data studio. The recruitment related data is analysed through Google data studio and rest of the processes as per the Table 1 are analysed through Tableau. Live dashboards are framed for review on daily basis which will give insights on the data and analytics to be framed.

III. CONCLUSION

HR analytics is more important as it improves the performance of the employees, improves ROI of human resources, provides opportunity to assess how employees contribute to the organization, forecasts workforce requirements and determines the best ways to fill the vacant positions, links workforce utilization to strategic and financial goals to improve business performance etc.

The case organization had started with descriptive analysis on data collected through different initiatives and today there are performing predictive analysis on most of the data like employee turnover. The decision making is supported with analytics which makes it more strategic in nature and hence outcomes are keenly observed for impact on people and organization.

Model of HR Analytics followed by the Pharma organization is widely acceptable and can be replicated in other organizations of the same industry. The relevance of HR metrics chosen for analytics is high. The variation in the data is very low when scientifically analysed with other tools.

REFERENCES

[1]. Ulrich, M., & Russell, G. (2018). Analytical abilities and the performance of HR professionals. Human Resource Management, 57, 715–738. doi:10.1002/hrm.21854

[2]. Becker, 1964. Human Capital: a theoretical and empirical analysis, with special reference to education, 3rd edition

[3]. Fitz-Enz, 1984, HOW TO MEASURE HUMAN RESOURCES MANAGEMENT, McGraw-Hill, Incorporated

[4]. Toulson &Dewe, 2004, HR accounting as a measurement tool, https://doi.org/10.1111/j.1748-8583.2004.tb00120.x

[5]. Lazear & Shaw,2007, Personnel Economics: The Economist's View of Human Resources, journal Of Economic Perspectives, VOL. 21, NO. 4, FALL 2007

[6]. Holbeche, 2009, Aligning Human Resources and Business Strategy, Second Edition 2009

[7]. Heuvel &Bondarouk, 2016, "The Rise (and Fall?) of HR Analytics: The Future Application, Value, Structure, and System Support", https://doi.org/10.5465/ambpp.2016.10908abstract

[8]. Kaufman, 2014, Measuring the Quality of Workplace Relations and Organizational Performance with Alternative Balanced Scorecards from Strategic HRM and Employment-Industrial Relations, Andrew Young School of Policy Studies Research Paper Series No. 19-08