

## ABSTRACT

HR analytics is a buzz word among practitioners as well as researchers nowadays. Organisations seeking competitive advantage looks to retain their most talented employees and want to find new ways to keep them engaged. HR analytics helps organisation to do that but it comes with its caution and challenges. Many experts believe that HR analytics is nothing but a management fad that adds to the cost of the organisation. The paper discusses the various opportunities offered by HR analytics along with the issues and challenges it faces in today's dynamic business environment.

**Keywords::** Talent Management, HR Analytics

### 1. Introduction

With the joining of millennial, Gen Y and Gen Z workforce, talent management has become a huge headache for organisations today. The HR department is always concerned with the issues like right hiring, maintaining engagement levels and retention of the right people in the organisation. We are living today in the era of data. Every day a massive amount of new data is created and is made available for analysis. According to the research by Experian (2018), as much as 90% of total data available today was created in just last two years, and by 2020, the same amount of data again will be created. It is thus, not very easy to keep track of relevant data but with the advent of technologies like neural networks, blockchain, internet of things and artificial intelligence etc. it is now possible to analyse and predict human behaviours more efficiently and make decisions.

Besides the management of such a huge amount of data, another set of challenges that organisations are facing is in the field of evidence-based decision making. In a Harvard study by Pfeffer and Sutton (2006), three majors, were identified in evidence-based decision making. The first challenge discussed was that of mindset. Leaders across the globe still rely on their own beliefs and what has worked for them and organisations in the past rather than the objective data available to them at hand. The second challenge identified in the study talks about half-knowledge and nonsense information. Organisations still based their major decision on flimsy information, questionable knowledge and practices suggested by some popular authors. Third and the last challenge identified was that of casual benchmarking. A lot of organisations try to copy and implement the visible practices of other successful organisations in the process completely overlooking the other organisation's culture, vision and

mission and missing out on other important practices which are not so obvious to the outside. Thus, this kind of bench marking is often not useful and, in some cases, even detrimental to organisational performance. These challenges, therefore, push management to look for more objective solutions such as HR analytics.

Human resource managers in the past few decades has made a slow but steady progress in utilizing data effectively to make sound business decisions. Organisation these days are putting more and more trust in their HR personnel and taking their inputs in making and implementation of business strategies. HR analytics is not an uncommon concept to organisations anymore. Management understand the importance of relevant data over instincts in today's dynamic business environment. This paper will discuss the evolution of this concept followed by the opportunities, issues and challenges of HR analytics today.

### 2. HR Analytics

Employees are both the biggest cost as well as the biggest asset of any organisation. It is thus very important to be very careful while making decisions that affect the employees. Metrics and analytics have been long considered as important tools to assist us with such a decision. However, there is a lot of people consider HR analytics to be something that is concerned with accumulation and review of data; however, it has a broader scope. HR analytics is more concerned about collecting relevant data related to certain HR processes and thereupon taking relevant decisions based on this data to improve these processes. Though there are many HR functions wherein HR analytics may assist the managers, however, there are four specific HR functions for which managers usually are taking the help of analytics. These four functions are acquisition, optimisation, development and compensation to employees.

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**Figure 1: Core HR Functions Supported by HR Analytics**

HR analytics empower managers by giving them full visibility of the various process and further streamlining them. Thus, it helps an organisation in making effective use of its workforce. Some of the key HR metrics used these days are early turnover, absenteeism, cost per hire, employee engagement rating, revenue per employee, time to hire, performance and potential, time since last promotion etc. HR analytics combine this above data obtained from people with other indicators such as financial plans and operational performance to help management with decision making that impacts the organisation as a whole.

One of the critical advantages that HR analytics offers besides talent management is that it helps organisation to know more about the skills it needs. According to the study conducted by the Gartner (2019), about 66% of HR managers believe it is a priority to understand and build the critical skills and competencies required to run the organisation. HR analytics helps to highlight these capabilities and support the growth of the organisation.

### 3. Evolution

The evolution of automation in HR processes dates back to 1980s when firms were showing little to moderate inclination towards making payroll and data administration processes automated. This led to the adoption of the Human Resource Information System (HRIS) by the organisations (DeSanctis, 1986; Taylor and Davis, 1989). Both the businesses and researchers at that time studied the tech requirements for setting up and operationalised such systems, but to a large extent, the use of HRISs remain limited.

The real wave of development came in the 1990s during which several studies established the benefits of using HRISs to reduce the administration in HR processes (Kossek et al., 1994; Hannon et al., 1996). Rapid growth in the use of information systems and increased efforts to integrate HR processes were also complemented by developments such as the adoption of the internet. The flow of global communication increased manifolds, and fast two-way communication made it imperative for organisations to take their processes online.

The year 2000 onwards marks the increased efforts to understand the progress of HR practices technological progress in previous decades. Concepts such as e-HRM surfaced along with the buzzing HRIS in the field. HR managers started basing their routine as well as critical HR decisions based on the data available, making the use of IT applications imperative. Not just the basic operations but the technology was increasingly used to obtain relevant data to make decisions about performance management, compensation management and talent acquisition etc. (CedarCrestone, 2006).

The current decade is the decade of social media and digitalisation. People are no longer afraid of creating and using data. These are the times when everyone is busy creating more and more data on social platforms. This data can be used for various purposes. Our personal, as well as professional lives, have become extremely 'datafied' (Strong, 2015). This digitisation has led to organisations using this data as a means to develop strategies (including HR strategies) making themselves more receptive to HR analytics and are willing to invest in systems which can help them making efficient decisions.

### 4. Opportunities

According to a Delloitte (2016) study, In 2015, roughly about 24% of companies felt that they were ready for analytics; it increased to 32% in just one year. In the same report, it was mentioned that India along with countries like Australia, Italy and the Netherlands, consider people analytics as important for organisations. Many organisations such as HCL, ZS Associates and Delloitte etc. are already using HR analytics and Big Data to base their decisions and are benefitting from it. More and more organisations in the future are going to adopt HR analytics for their day to day decision making.

Psychology has always played an important role in the HR department. These are the times when people are matching psychology with the available relevant data to reach a logical decision. Organisations (especially HR departments) are undergoing a paradigm shift. We are living in the age of digital HRM stage where HR based on sound data analysis is imperative for developing sound organisational strategies. Decision sciences and HR had never been so close than current times. Just like the

marketing decision science and finance decision science, there is an increased awareness towards using HR decision science to know people in and around organisations. Talent management and employee engagement are two of the many strategic buzzwords for top organisations using HR analytics to boost their productivity. HR analytics along with similar concepts such as people analytics and workforce analytics has undoubtedly become a mainstream concept (Fechey-Lippens et al., 2015) for organisations these days.

According to AIHR (2018), with the help of HR analytics, managers can

- " Make better hiring decisions by predicting the success of the candidate.
- " Reduce employee turnover by effectively manage a talented workforce.
- " Test the employee policies for effectiveness and segregate the ineffective policies.
- " Identify the risk of accidents in the workplace.
- " Analyse the demand and supply of the workforce.
- " Analyse and predict employee experience with the organisation.
- " Help devise HR strategies linked to business outcomes.

Besides the above HR functions, analytics may also help HR in improving processes as it would be easier for the HR managers to identify the right people for the right jobs within the organisations. The deployment of the right people would not only improve the performance but would lead to much better results in terms of innovation and resilience in times of difficult market or dealing with competition. In an interview given to CPHR, workforce analytics firm Visier shared many interesting insights about the growth and development of HR analytics over the years. According to their observations, many organisations have set up these artificial limits which restrict their top performers from earning extra. Metrics such as Performance-Based Compensation Differential (PBCD) can help organisations to determine the appropriate compensation for performance outliers. As more and more organisations are moving towards strategic and sustainable human resource management, it is expected from CHROs to come up with informed suggestions that may help organisations to strategise better.

As rightly pointed out by many experts in the field, HR analytics is just the first step in the right direction. Data without a will to implement changes will take an organisation nowhere. As pointed out in the Deloitte study, the real challenge is to create value from the data

obtained. Organisations need to integrate analytics with change management to fully utilise the benefits.

## 5. How to Start with HR Analytics

One of the biggest reasons why many organisations hesitate to use HR analytics is the misconception that one has to be a data scientist to begin with. However, the same is not true and anyone with basic knowledge of HR functions and a little bit of curiosity can initiate an HR analytics programme. The first step anyone interested in HR analytics needs to take is to identify the specific business problem that needs a solution. Some of the problems could be retaining top talent, low levels of employee engagement, absenteeism etc. Once the problem(s) has been identified, the second step is to establish your aim. It is important to lay down the desired outcomes. What would it look like for individuals, groups and organisation? Managers can devise certain goals for different divisions and departments. Once the outcomes are agreed upon, it is important to identify the areas of priority. The next step would be to identify the requirements such as technology, metrics, investment etc. for the implementation of the plan. The penultimate task is to find out how the insights would be communicated within the organisation. Data could be complicated at times so one needs to use effective visualisation tools to communicate it effectively. The last and the most difficult task is to take some action on the insights, initiate a change and then subsequently measure its impact.

Thus, the key here is the determination to adopt an organisation-wide HR analytics programme that collects relevant data and enable managers to adapt to changes required.

## 6. Challenges

Despite the brilliant opportunities discussed in the above section for the field of HR analytics, organisations are still struggling to use the HR analytics efficiently and more often than not, HR managers limit themselves to operational reporting. Some of the major challenges that organisations face are as follows:

1. **HR Curiosity:** Despite the changing landscape of competitiveness, still in many organisations, HR department lacks the involvement at strategic levels. HR managers often fail to ask and answer questions like what the metrics are needed or what kind of things are needed to be evaluated to make a difference at the corporate/business level.
2. **Lack of data analysis skills:** As generic, this problem may seem, organisations still lack skilled data HR professionals who can utilise data such employee demographics, motivators, behaviours etc. for diverse employee groups and individuals across the firm to generate high performance. They are still dependent

on employees from the IT department or quality team for the analysis. Organisations need to consider training on data analysis for their HR team as a part of their professional development.

3. **Data quality:** Most of the critical data is still manually inputted by managers working for different processes within various departments of the organisations. Now, there is a high possibility of individual subjectiveness when we are collecting qualitative data/reporting of incidents or issues. The analysis in these cases would be only as good as the data is. This is one of the biggest drawbacks for evidence-based decision making today. The whole idea is to be more objective and based on facts and numbers, while the data we are exposed to might be highly subjective or biased in many cases; thus, not a true reflection of facts.
4. **Broad Data:** another big challenge for HR professionals is the size of the data. Amount of data generated in the organisations could be too big to analyse. Eg. Data on attrition, for organisations such as IT organisations where the attrition rate is very high, it is difficult to analyse if the good employees are leaving the organisations for their reasons or is it something to do with the organisation.
5. **Absence of Big Data:** Contrary to the above point, there could be organisations which are too small to generate sufficient big data to facilitate critical thinking and decisions based on analytics. At best, this data can be utilised for reporting operations and productivity, but higher-order analysis based on this data is not that useful. E.g. an SME may only have 30 employees so any kind of employee-related data would be too small to come up with a generalised explanation.
6. **Slow movement/holding of information:** Despite the wide use of latest HRIS/LMS etc. in most organisations today, HR often fails to utilise all this information on a real-time basis and come up with reports delivering positive, impactful information for top management.
7. **ROI:** Again, a major challenge for organisations is to determine whether their investment in data analytics is useful in terms of increasing the overall productivity and performance of the workforce. As in the end, all these costs need to return some value to these organisations. Often, the organisations generate a lot of metrics and data but unable to make any decisions actually to improve their profits in the long run. There have been instances where the data analysts claim to generate a lot of useful information for an organisation, but the top management prioritises other issues over these reports and does not

spend much time in utilising these reports. Another roadblock for some organisations maybe that data management can be expensive especially if the organisational structure is complex, lack any data strategy and is a part of a fragmented ecosystem. Thus, a lot of organisations may refrain themselves to use any advanced tools for analytics and might stick to basic excel sheets for reporting.

## 7. Road Ahead

HR analytics may be considered as a buzz word for now but it will be an indispensable tool for organisations in the future. Not only it makes HR decisions more efficient and effective but also a right step in the direction of evidence-based HR. While we have been focussing on Data and data analytics, in order to make HR analytics more relevant, what managers need to do is to first focus on the problems/challenges and then focus on data along with analysis to reach to a logical solution. HR analytics functions are still in its growth phase and probably deliver better results at it approaches its maturity. Having said that, it is definitely not a management fad and top management needs to invest and evolve HR functions through analytics for developing sound strategies and developing core competencies.

In a nutshell, HR analytics may not be a solution of every HR issue/challenge, but it definitely provides relevant insights to people who are looking for solutions. HR analytics is therefore a rationale to HR managers' subjectivity. In order to make HR analytics work, an organisation must empower and support its human resource department. Setting up an in-house analytics team along with a learning and development team could be a good first step in this direction.

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