# Research Report Hr Analytics/People Analytics By Swapnil Malge

[Data science student, MIT Rise WPU]



### Abstract:

Human Resource Analytics, also known as HR Analytics, is the process of using data to analyze and improve various aspects of human resource management, including recruitment, retention, performance management, and employee engagement.HR Analytics involves collecting and analyzing data from various sources, such as employee surveys, HR databases and performance metrics to identify trends, patterns, and opportunities for improvement.

The insights gained from HR Analytics can help organization make more informed decisions about their workforce, such as identifying top performers, developing effective training programs, and improving employee retention. By leveraging HR Analytics, organization can improve their overall performance and achieve their strategic goals.

### Introduction:

HR Analytics is also known as people analytics or talent analytics. It is the process of using data analysis to gain insights and make informed decisions about an organizations workforce. HR Analytics involves collecting, organizing, and analyzing data related to employees, job positions, recruitment, retention, training, performance, and other HR metrics.

HR analytics helps organizations to better understand their employees, improve decision making an optimize their HR practices. By analyzing data, HR professional can identify patterns and trends that can help them to make better decisions about hiring, employee engagement, performance management and other important areas of HR.

HR analytics can provide valuable insights into workforce demographics, employee engagement, performance and productivity. It can help HR professionals to identify areas where employees may need additional training or support and to make more informed decisions about promotions, compensations and benefits. Overall, HR Analytics is a powerful tool that can help organizations to improve their HR practices and make data driven decisions that are more likely to lead to success.

# Origin and history of HR analytics:

HR analytics/people analytics is relatively new fields that has emerged as a result of increasingly availability of data and advancement in the technology. The field involves using data analysis techniques to gain insights into human resource management and workforce planning.

The roots of HR analytics can be traced back to the 1950s and 1960s, when management researchers began using statistical analysis to study organizational behaviour and human resource management. However, it wasn't until the 1990s and early 2000s that HR analytics began to gain widespread recognition as a formal field of study. One of the earliest pioneers of HR analytics was Jac Fitz-enz, who is widely credited with popularizing the term "human capital" and developing many of the foundational concepts of the fields. In the 1990s he founded the Saratoga Institute, which focused on colleting HR related data and developing benchmarks for workforce performance. Another early contributor to the field was John Boudreau, who in the early 2000s developed the "talent management maturity model" and conducted research on the links between HR practices and business outcomes.

In the 2010s, HR analytics began to gain more widespread adoption, as companies began investing in the data management and analysis tools and platforms. This led to emergence of new HR analytics companies and consulting firms as well increased attention from academics and researchers. Today HR analytics is rapidly growing field that is

being used by organizations of all sizes and industries to gain insights into their workforce and make more informed decisions about talent management and HR strategy.

### **Evolution of HR analytics:**

In 1978 an article titled "the measurement imperative" proposed the idea of measuring the impact of HR activities with collected data on the bottom line of the business. The proposed activities included staff retention, staffing, compensation, competency, development etc.

In 1990, with growing development in the field of HR measurement integration with more business dimensions, the predictive and assessment models become a subject of study. But still the field of HR analytics remained unknown to many organizations and they couldn't realize its potential. The development leading to concept of benchmarking to compare the HR measurement data in various functions and with other companies. Though companies soon realize that while in the theory 'benchmarking' promises to provide strategic business insights, in real business scenario it fails to do the same and Benchmarking lost its recognition by early 2000.

In 2000, the emergence of HR accounting and utility analysis was witnessed and this added new dimension and measurement data to quantify HR. Researchers not only drew the inference from business firms but from other source too. One such research is on the metric model adopted by Billy Beane, the general manager of the USA baseball team to select team members. The study led to a breakthrough metric-based selection model development called as 'Moneyball' concept in 2003 and found its adaption at large scale by organization since 2006.

Early adaptors companies are Google, IBM and some companies realised the potential named as Microsoft, Mindtree, ConAgra Foods, Wipro Ltd.

## Scope of HR analytics:

HR analytics is a rapidly growing field that involves using data analysis techniques to better understand and optimize various HR functions within organizations. The scope of HR analytics includes:

Recruitment Analytics: The process of analyzing data to optimize recruitment strategies, identity the best sources of talent, and measure the effectiveness of the recruitment process.

Performance Analytics: The process of using data to assess employee performance, identity patterns, and determine the factors that impact employee productivity.

Employee Engagement Analytics: The process of measuring employee engagement and using data to identify factors that influence it. This helps organizations understand how to create more engaging workplace environment.

Workforce Planning Analytics: The process of using data to forecast the future needs of an organization and identifying the skills and competencies required for the workforce to meet those needs.

Talent Analytics: The process of analyzing data to determine the most effective ways to attract, develops, and retain employees.

Diversity And Inclusion Analytics: The process of analyzing data to measure and improve diversity and inclusion within an organization.

Overall, HR analytics can help organizations make data driven decision that can lead to improved employee satisfaction, productivity, and organizational performance.

# Applications of HR analytics with examples of practical implementation :

Human resources(HR) analytics, also known as people analytics, is the process of using data and analytics to make informed HR-related decisions. It involves collecting, analyzing, and interpreting data about employee and HR practices to help organizations make data driven decisions.

Here the some examples of how HR analytics can be applied in practice:

Recruitment And Selection: HR analytics can be used to improve recruitment and selection by identifying the most effecting sourcing channels, analyzing candidate data to identify predictors of success and evaluating the effectiveness of pre-employment assessments.

For example, google uses HR analytics to identify the characteristics of their top performing employees and then uses this information to hire candidate who possess similar traits.

Employee Engagement And Retention: HR analytics can help organizations to better understand employee engagement and retention. *For example*, by analyzing employee feedback data, companies can identify the factors that impact engagement and retention and take action to improve them. this can include initiatives such as offering flexible work arrangements, career development opportunities and recognition programs.

Performance Management: HR analytics can be used to evaluate the effectiveness of performance management programs and to identify areas for improvement. *For example,* By analyzing performance data, organizations can identify trends and patterns in employee performance, which can be

used to develop more effective performance management strategies.

Training And Development: HR analytics can be used to evaluate the effectiveness of training and development programs. *For example*, by analyzing training data, organizations can identify which training programs are most effective at improving employee performance and can make changes to improve the programs that are not effective.

Diversity And Inclusion: HR analytics can be used to identify and address diversity and inclusion and inclusion issues within an organization. *For example*, by analyzing demographic data, organizations can identify areas of the business where there is lack of diversity and take actions to address this issue.

In summary, HR analytics is powerful tool that can help organization make data-driven decision related to their people management practices. By leveraging data and analytics, organizations can improve recruitment and selection, employee engagement and retention, performance management, training and development, training and development and diversity and inclusion.



## **Business Impact Of HR Analytics:**

The business impact of HR analytics can be significant, including:

Improved Recruitment And Hiring: HR analytics can help organizations identify the most effective recruitment channels, improve candidate selection processes and reduce the time-to-fill vacancies. This can lead to better quality hires, improved retention rates and reduce recruitment costs.

Better Employee Performance: HR analytics can help to identify the key drivers of employee performance and engagement, enabling organization to make data driven decisions to improve employee productivity, satisfaction and retention. This can result in improved business outcomes, such as increased revenue and profitability.

Improved Workforce Planning: HR analytics can help organizations identify skills gap, workforce trends and potential workforce shortages, enabling better workforce planning and management. This can help organizations to optimize their workforce, reduce labour costs, and improve productivity.

More Effective Training And Development: HR analytics can help to identify skill gap and training needs, enabling organizations to provide targeted training and development programs that align with business goals. This can led to improved employee performance, increased job satisfaction and reduce turnover.

Increased Diversity And Inclusion: HR analytics can help to identify an address biases in recruitment and performance management processes, enabling organizations to build more diverse and inclusive workforces. This can led to improve

innovation, better decision-making, and increased employee engagement

Overall, HR analytics can provide organizations with valuable insights that enables them to make data driven decisions that optimize HR practices and processes, resulting in improved business outcomes.

