



Role of HR Analytics on Employees Performance

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ABSTRACT

Performance management has long been an important function of HR. It serves several functions. The first is that it gives employees a set of standards by which they need to adhere to, to be successful in their role. Performance management helps employees know if they are meeting their goals and gives them clear indicators of what parts of their performance could use improvement and which parts are meeting or exceeding expectations. It also helps the employer give more structure to roles, which can lead to more productivity from their teams. Overall, performance management helps to give solid shape to what employee's need to be doing at their job to stay on board, to get a raise or to receive a promotion. It also helps employers better understand what their teams or individual employees may need by way of motivation or communication to improve overall performance.

Keywords: Employees, management, performance, analytics, human resource, motivation, goals, successful

1. INTRODUCTION

HR analytics in performance management can help your business and your employees.

1. Hiring top performers from the get-go

One way that businesses can elevate the performance of employees is to hire the best, most productive employees from the start. HR analytics helps managers better evaluate resumes and other talent metrics to give more insight into which applicants are more likely to be driven, dedicated, invested, and engaged.¹ Some indicators include being promoted within their organization, good references, high rate of project completion, and other factors that HR analytics can help HR teams pinpoint out of candidates and sort through during the hiring process.²

2. Easier assessments

Performance management in the past has been primarily handled by an employee's immediate supervisor who gives feedback during an annual review. More modern HR practices are including HR analytics and other software solutions to help bring about a more holistic view of performance management. With HR analytics in performance management, HR can see red flags or low-performance indicators and address them before they become a problem that leads to a lost employee or lost productivity and revenue at the business level. Things like increased tardiness, missed assignments, and other factors can be monitored and communicated with management and employees to help raise performance and productivity collectively.³

3. Concrete measures

When HR analytics are part of an overall human capital management strategy and software solution, a lot of clarity can be gained, which is for employers as much as employees. With an HCM system, performance reviews are more accessible to employees with goals that are measurable, trackable, and less vague. Performance management tools and employee reviews are meant to give employees a clearer picture of what they are doing well, what they should continue doing, what they need to improve on, and how to make those improvements. HR analytics is able to use real data to inform employees and managers and help both make decisions and goals based on that data.⁴

4. Better predictions

HR analytics can help employers track trends over time. If they are noticing a lot of lackluster productivity or people in certain departments quitting, they may be able to look deeper into underlying issues, such as demoralizing managers, lack of training or advancement opportunity, need for better communication, or other HR analytics in performance management⁵

HR analytics in performance management helps businesses have a better understanding of what is needed among their staff to help boost productivity and ultimately help drive up performance enterprise-wide. HR analytics helps employers identify performance gaps and work to help address them, using the data that analytics offers. With better data comes better planning and planning can help set the foundation for the best possible performance.

There is more to human resource function than just hiring and onboarding. With the introduction of HR analytics, the human resources domain has undergone a radical makeover. Organisations use HR analytics to analyse employee turnover, optimise the talent supply chain, extract insights to help decision-makers, and more. When integrated with a company's overall strategy, HR analytics can improve productivity, performance, and profitability. Further, HR analytics offers a single-window into the workforce and talent data to drive business processes.⁶

HR analytics covers five major areas:

- To improve HR performance
- Transforming the role of HR as a strategic partner

- Predict demand in skills and vacancy within the organisation
- Identifying attrition and its cause
- Performance evaluation and management⁷

Research suggests a fair performance evaluation and appraisal process is key to a happier workforce, and leads to better business outcomes. Traditionally, performance evaluation has inclined towards practices such as the Bell Curve Method. The methods are subjective and time-consuming. Poor dynamic, bias, inaccuracy, and inadequate feedback make such methods a bad fit for current work environments. This is where HR analytics come in handy. Its first component is collecting and tracking high-quality data. The collected data usually comes from the HR system already in place, the learning and development systems, and other data-collection techniques such as cloud-based systems and mobile devices. The type of data collected includes—employee profile, performance data, salary and promotion history, training, engagement, retention, absenteeism, etc.⁸

For the performance appraisal, HR analytics can help in the following ways:

- Ensure transparency in annual reviews using data-backed decisions, lending legitimacy to the whole process.
- Using performance prediction to measure business performance and hand out benefits
- By effectively deriving insights from the available data, HR managers can identify better performers and incentivise them, leading to lesser attritions.

HR Analytics For the Appraisal Process

Predictive analytics: It is applied to the workforce to identify patterns on both individual and team level. The associated algorithms can provide objective insights into the work preferences and performance drivers.⁹

Engagement: With analytics, HRs can identify engagement activities that directly or indirectly impact employee performance. It has two advantages—encourages organisations to invest more in performance building activities and in defining a metric that correlates performance with engagement.

Real-time analytics: Many companies such as Google, Microsoft and others are moving from an annual performance evaluation to a more real-time analysis of

performance to make timely decisions. This estimates performance more extensively and helps recognise red flags and predict which employees come under the flight risk category.¹⁰

Succession: Using HR analytics for appraisal and performance evaluation also means that HR can use the same data for succession planning. It can anticipate promotions, transfers, and professional break-ups beforehand.

Better Feedback: Analytics helps employees derive most from the feedback. Since it is data-backed, such performance feedback in most cases has a constructive impact on employee productivity.

Expert Insights

"HR analytics helps employers identify performance gaps during an appraisal cycle and work to help address them using the data such as increased tardiness, missed assignments, and other factors. These factors can be monitored and communicated with management and employees to help raise performance and productivity collectively," said Khushboo Gogoi, Head, BU (Talent acquisition), AIM.¹¹

It also helps the employees monitor their performance & self-appraise based on the parameters that HR Analytics provides, leading to increased employee satisfaction, she added. Terming it as the final step in 'remotifying' businesses, Samir Parikh, CEO & MD, NamanHR said, leaders are using real-time analytics from next-gen performance management tools. "Technology is helping employees in creating and navigating their own reskilling programs to fulfil their performance expectations. We will soon see ML & AI integrating business data with capability and personality data of employees as well as organisational culture data to predict suitability of organisation's internal energy for measuring individual and organisational performance," said Parikh. "As an appraisal tool, technology enables you to track performance over an entire year consistently without gaps.¹² This means that, to a large extent, human error or bias is eliminated and decisions about promotions, salary hikes, and other important aspects are made based on quality data rather than just human insights. Moreover, analytics can also enable organisations to set annual KPIs and measure them effectively during the appraisals," said Neeti Sharma, Senior Vice President, TeamLease Services.

2. DISCUSSION

Human Resource Analytics (HR analytics) is an area in the field of analytics that refers to applying analytic processes to the human resource department of an organization in the hope of improving employee performance and therefore getting a better return on investment. HR analytics does not just deal with gathering data on employee efficiency. Instead, it aims to provide insight into each process by gathering data and then using it to make relevant decisions about how to improve these processes.¹¹

Mick Collins, Global Vice President, Workforce Analytics & Planning Solution Strategy and Chief Expert at SAP SuccessFactors defines HR Analytics as "a methodology for creating insights on how investments in human capital assets contribute to the success of four principal outcomes:

- (a) generating revenue,
- (b) minimizing expenses,
- (c) mitigating risks, and
- (d) executing strategic plans.

This is done by applying statistical methods to integrated HR, talent management, financial, and operational data."¹²

With the continuous influx of tech innovations challenging the workplace, HR analytics enables intelligent decision-making for better talent and business management. Equipped with analytics, HR leaders can elevate their strategy to improve the employee experience, reduce attrition, and boost the company's bottom line.¹³

HR analytics doesn't collect data about how your employees are performing at work, instead, its sole aim is to provide better insight into each of the human resource processes, gathering related data and then using this data to make informed decisions on how to improve these processes. It encompasses many different fields:

- Capability analytics enables managers to identify core competencies their business would benefit from.
- Competency acquisition analytics assesses how well the business succeeds at acquiring those competencies.
- Capacity analytics measures the operational efficiency of individual employees.

- Employee churn analytics assesses turnover rates, which is the first step in figuring out how to decrease them.
- Corporate culture analytics examines corporate culture across an organization, attempting to pinpoint potentially toxic environments.
- Recruitment channel analytics seeks to determine where top-performing employees tend to come from.
- Leadership analytics and employee performance analytics assess the overall performance of managers and workers based on information like interviews.¹⁴

HR analytics demonstrates the causal relationship between the activities exacted by an HR department and the business outcomes that result from this activity. Although the realm of human resources analytics can involve a wide range of activities, there are generally four core functions that manifest within the field.¹⁵ The core functions are the acquisition, optimization, development, and paying of the employees within a business or organization. To optimize each of these core functions, human resources analytics representatives will work with managers by gaining information from them regarding the issues and problems that pertain to their unique workforce.

HR Analytics is made up of several components that feed into each other.

- To gain the problem-solving insights that HR Analytics promises, data must first be collected.
- The data then needs to be monitored and measured against other data, such as historical information, norms, or averages.
- This helps identify trends or patterns. It is at this point that the results can be analyzed at the analytical stage.
- The final step is to apply insight to organizational decisions.¹⁶

Let's take a closer look at how the process works:

1. Collecting data: Big data refers to the large quantity of information that is collected and aggregated by HR for the purpose of analyzing and evaluating key HR practices, including recruitment, talent management, training, and performance. Collecting and tracking high-quality data is the

first vital component of HR analytics. The data needs to be easily obtainable and capable of being integrated into a reporting system. The data can come from HR systems already in place, learning & development systems, or from new data-collecting methods like cloud-based systems, mobile devices, and even wearable technology. The system that collects the data also needs to be able to aggregate it, meaning that it should offer the ability to sort and organize the data for future analysis.¹⁷

- What kind of data is collected?
 - employee profiles
 - performance
 - data on high-performers
 - data on low-performers
 - salary and promotion history
 - demographic data
 - on-boarding
 - training
 - engagement
 - retention
 - turnover
 - absenteeism

2. Measurement: At the measurement stage, the data begins a process of continuous measurement and comparison, also known as HR metrics. HR analytics compares collected data against historical norms and organizational standards. The process cannot rely on a single snapshot of data, but instead requires a continuous feed of data over time. The data also needs a comparison baseline. For example, how does an organization know what is an acceptable absentee range if it is not first defined? In HR analytics, key metrics that are monitored are:

- Organizational performance: Data is collected and compared to better understand turnover, absenteeism, and recruitment outcomes.
- Operations: Data is monitored to determine the effectiveness and efficiency of HR day-to-day procedures and initiatives.¹⁸
- Process optimization: This area combines data from both organizational performance and operations metrics in order to identify where improvements in the process can be made.

A. Human Resources Analytics Types and Processes

Human resources analytics doesn't just encompass various fields, like competency acquisition analytics and employee churn analytics. Different types of human resources analytics can be identified and applied across these different fields. These distinct processes serve different purposes, but they all share one thing: a reliance on data. The primary types of human resources analytics are:

- **Operational reporting.** Operational reporting is used to examine what's happened in an organization's past. It relies on existing data, which is then analyzed to determine what it means for the company. For example, operational reporting related to employee churn can be used to understand why a large number of employees left an organization in the previous year. Since most companies require exit interviews, HR professionals can examine this data to determine trends.¹⁹
- **Advanced reporting.** Advanced reporting is proactive, casting an eye toward the future rather than looking back. It's an automated process and regularly examines relationships between variables. For example, advanced reporting related to competency acquisition can track competencies that are in demand in a company to guide future hiring. As companies become more digitally driven, they may have less need for administrative staff to handle tasks—like printing, transcribing, collating, and copying—and require more tech-savvy individuals instead.
- **Strategic analytics.** Strategic analytics consider financial, organization-specific, historical, or employee-driven data to inform business planning. In studying corporate culture, it might analyze the correlation between financial investment in team-building events and the results of employee satisfaction surveys. If the analysis shows a link between increased frequency of team-building events and higher employee satisfaction, it would suggest that this is money well spent.
- **Predictive analytics.** Predictive analytics is the most mature type of human resources analytics. Instead of just analyzing data, this approach evaluates data in order to make predictions about the future. The resulting knowledge can be used to plan ahead. For

instance, a strategic look at capacity analytics may indicate that employee productivity lags around the holidays. In this case, HR can propose that the company offer added incentives, like a performance-based bonus, to keep productivity on track at that time of year.²⁰

B. HR Analytics Process²¹

Incorporating the following practices can pave a smooth path for the effective integration of HR analytics:

- **Create a plan.** Determine the issues to focus on, ranking the most pressing ones first. Include a detailed breakdown of the HR functions and how to adjust them to overcome the company's business challenges. Identify metrics to drive results and elevate HR functions to reach long-term goals.
- **Involve data scientists.** Welcoming data scientists into the process enhances HR analytics. Data scientists can monitor the quality and accuracy of the data while helping HR professionals understand the information and implement it strategically. With well-organized and clearly displayed information, HR leaders easily share the information with stakeholders to promote an agenda.
- **Prepare HR personnel.** Request that HR team members evaluate how influential the role of HR analytics is in developing the company's business strategy. Once they cultivate an awareness of their standing and determine what they need to do to reach the next level, they can take steps to progress.²¹
- **Educate HR professionals.** Analytics brings an abundance of AI that challenges the status quo at work, so HR professionals must educate themselves about developing technological trends. HR leaders can help HR generalists and business partners adapt to digital transformation by facilitating professional development opportunities.
- **Ensure legal compliance.** It's up to HR to ensure managers, executives, individual contributors, and other HR team members understand the importance of complying with local and national labor and privacy laws. Be transparent concerning the type and amount of data the company collects.

HR leaders can consult a specialist in employment law to assist them in following regulations and implementing by laws.²¹

C. HR Analytics Maturity Model^[8]

An analytics model made popular by Deloitte describes the four levels of HR analytics "maturity" — in other words, the complexity of the data analytics the company uses to solve problems. Here is how the levels are interpreted:

Level 1: operational reporting. Level 1 HR analytics is defined as using data to understand and reflect on what happened in the past—and maybe going further to draw conclusions as to why past events played out in the ways they did. The fundamentals of this level of HR analytics are understanding already available data and eventually coming to an agreement as to what the data mean for the company.

Level 2: advanced reporting. The significant difference that separates Level 2 from Level 1 is the frequency of the data reporting. The authors define this level of reporting as proactive, routine, or even automated. The top functionality at this level is simply looking at relationships between variables.²²

Level 3: strategic analytics. HR departments operating at Level 3 are at the beginning of a thorough analysis. These analyses may occur in the form of developing causal models or looking at how relationships between variables affect outcomes.

Level 4: predictive analytics. The highest level of the HR analytics maturity model is defined by making predictions. HR departments functioning at Level 4 are gathering data and using it not only to predict what will happen in the future but also to plan for it. An example of Level 4 operations is "using turnover, promotion, and market data to model scenarios that help with workforce planning," the authors write.²³

D. Benefits of HR Analytics^[9]

HR Analytics helps your organization become more strategic, data helps you tackle current issues and also plan better for future activities. Let's look at some of the benefits that HR Analytics offers:

- Improve your hiring process: Talent acquisition is a key element of your HR process, it is an all-year-round activity. Be it hiring for a new

function, a larger team, or a new role altogether, your TA team is always busy. Finding the right candidate is always a task, and when they do, one can only hope everything goes well and they actually join the organization. How many candidates actually join, and how many drop off at what stage? What job boards work best for you? How many candidates do you need to reach out to close a position? These are just some questions that you could look at resolving through analytics. This data will help you see the bigger picture and fill in whatever gaps are causing delays.

- Reduce attrition: Employee retention is becoming harder every day, especially with the younger workforce not afraid of switching jobs frequently. Conduct exit interviews, gather data, look at the reasons, and patterns and find a way to arrest the attrition rate. HR Analytics here will go a long way in identifying what are the factors contributing to attrition and what remedial measures can be taken to avoid it in the future.
- Improve employee experience: It is imperative for managers and HR reps to meet with employees regularly to understand what factors are affecting employee experiences in positive and negative ways. This is a crucial step in improving employee experience. Many organizations fail to realize that employee experience starts with hiring. Your first interaction with a candidate before hiring is equally important to any other HR-related process. Employee experience is the sum of experiences that an employee feels throughout their journey. Every step, every behavior, and every experience counts.²⁴
- Make your workforce productive: Productivity levels will always go up and down and there are a host of factors affecting that. This ranges from office infrastructure, work environment, managers and team-mates, and job satisfaction among other things. Gathering data on what's affecting productivity will certainly arm you with data to take corrective actions. Employee engagement is a key factor affecting workforce productivity, look at improving engagement. You can start off by implementing a few employee engagement ideas and activities to boost the rate.

- **Improve your talent processes:** Talent processes are not only about pre-hiring, hiring or annual performance reviews, but they are also much more than that. You need to consider training, recreational activities, and counseling among others. While each organization is unique, there are some processes that should be standard, these can be regular one-on-ones, skip-level meetings, etc. HR should always be monitoring their talent processes, identify challenges and bottlenecks if any, and then work on them. It's ideal to meet with employees, however, we understand this may not always be possible or feasible. Conducting employee surveys is a good idea, get their feedback and inputs and work on them, let them know they are being heard. Employee surveys don't always have to only be exit surveys, do it to see what they feel about employee benefits, how employee experience is at your organization, what changes they would like to see for improving it, etc.
- **Gain employee trust:** Thanks to HR Analytics, you have access to data that lets you see what's happening in the organization and how employees are perceiving it. When you are armed with data, it lets you fix what's supposedly broken and improve future processes. You can clearly see what's working and what's not. When you bring about changes to processes to make them better and introduce new ones, your employees take notice. They know their feedback is valued and the management team will act on it. This is crucial to building and maintaining employee trust, a critical element to high employee engagement, employee success, and employee retention percentages.²⁵

HR Analytics does not mean buying expensive software, setting up a huge team, or long processes. You can start small – have conversations with employees, record their responses, add managers in the loop, involve various functions, make a plan, share it with everybody, and commit to it. Sharing the data is crucial to make sure everyone knows it, understands it, and suggests ideas to improve the employee experience. Use the data to drive initiatives, remedy any existing problems, and bring positive changes to the organization. HR Analytics will help you monitor and improve your employee engagement, employee

retention, employee wellness, employee productivity, employee experience, and work culture.

3. RESULTS

A Human Resources (HR) Analyst is responsible for analyzing and evaluating data related to HR operations. They use this data to inform decisions, develop strategies, and improve operations. To become an HR Analyst, you must have an understanding of the HR field, data analysis, and problem-solving skills. Here are the steps to becoming an HR Analyst:²⁶

1. Earn a Bachelor's degree in Human Resources or a related field. This will give you the foundational knowledge and skills needed to become an HR Analyst.
2. Develop data analysis and problem-solving skills. HR Analysts must be able to analyze data, identify trends, and develop solutions. This can be done through courses, certifications, or on-the-job training.
3. Gain experience in the HR field. You can do this through internships, volunteer positions, or entry-level roles. This will give you a better understanding of the HR field and how to analyze data.
4. Pursue a certification in HR. This will demonstrate your expertise in the field and give you an advantage when applying for jobs.
5. Apply for HR Analyst positions. You can find these positions in a variety of industries, such as healthcare²⁷

An HR analyst is a professional who works in the human resources department of a company. They use their knowledge of the organization and its policies to provide advice and guidance on personnel matters. They also analyze personnel data to identify trends and make recommendations to management on how to improve the organization's performance. HR analysts must have a thorough understanding of the organization's human resources policies and procedures, as well as the legal requirements surrounding them. They must also have a strong knowledge of the organization's goals and objectives.

An HR analyst must also have a strong understanding of the organization's recruitment and

selection processes. They must be able to identify potential candidates for positions, and recommend the best candidates for the job. They must also be able to assess the skills and qualifications of potential candidates, and make sure that they are suitable for the job. An HR analyst must also be able to analyze the performance of existing employees, and make recommendations for improvement. They must also be able to provide guidance and advice to management on how to improve the organization's performance.²⁸

HR analysts are responsible for a variety of tasks related to the recruitment, training, and overall management of an organization's human resources. They are responsible for developing and implementing strategies to ensure the organization's goals are met. They also work to ensure that the organization's human resources policies and procedures are up to date and in compliance with legal requirements. Additionally, HR analysts may be involved in overseeing the organization's recruitment process, ensuring that qualified candidates are identified and hired.

HR analysts also work to ensure that the organization's human resources policies are being followed and that employees are being treated fairly. They may be involved in the development of employee performance reviews and the implementation of performance improvement plans. They may also be involved in the development of compensation and benefits plans, as well as the development of employee training programs. Additionally, HR analysts may be responsible for providing reports and analysis to management on the effectiveness of the organization's human resources policies and procedures.

An HR Analyst is a professional who specializes in the analysis and management of Human Resources (HR) functions within an organization. The HR Analyst is responsible for providing strategic direction and guidance to the HR team and other departments within the organization. They are responsible for analyzing data and trends, providing insights and recommendations, developing and implementing HR strategies, and managing the HR budget. They must also ensure compliance with all relevant laws and regulations.

The HR Analyst must have a solid understanding of the organization's goals and objectives, and must be able to develop and implement HR strategies that are aligned with these goals. They must also be able to identify, analyze, and interpret data to identify trends and develop insights that can be used to inform decisions and strategies. Additionally, the HR Analyst must be able to communicate effectively with the HR team and other departments to ensure that all HR initiatives are properly implemented and monitored.²⁹

4. CONCLUSIONS

HR metrics are measurements used to determine the effectiveness and efficiency of HR policies. Metrics help compare different data points. For example, if turnover was 5% last year and is now 7.5%, it has increased by 50%. The former are data points, the latter is the metric. Metrics don't say anything about a cause, they just measure the difference between numbers. HR analytics, also called people analytics, is the quantification of people drivers on business outcomes. Analytics measures why something is happening and what the impact is of what's happening.³⁰

Conflict of interest statement

Authors declare that they do not have any conflict of interest.

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