

Advanced Analytics In HR: Applications And Examples



HR departments tend to generate a lot of data. However, in most organizations, HR leaders struggle to transform this data into meaningful insights. In fact, according to [Gartner](#), only 21% of HR leaders believe their organizations are effective at using talent data to inform business decisions.

However, the situation is fast changing, the importance of talent analytics or HR analytics in driving efficient hiring and talent management processes has rapidly grown in the past couple of years. In fact, according to a [report](#) by Gartner, 70% of organizations expect to increase the resources they dedicate to talent analytics in the coming years.

When harnessed and used effectively, HR data can be used to gain valuable insights that help hire the right talent, reduce costs, improve employee experience, boost employee performance, aid better people-related decisions, and improve the company's revenue.

Advanced analytics can be leveraged by HR teams to positively impact both talent and business decisions in the organization. HR can evolve from being just a people-management function to playing a more transformational role in human capital management and being a strategic business partner in the company.

8 Applications Of Advanced Analytics In HR

1. Hiring The Right Talent With Competency Acquisition Analytics

Hiring the right talent is instrumental to a company's success with employees amounting to one of the biggest costs and greatest opportunities in most businesses. Hence, in order to study whether or not you are acquiring the right talent for your business, competency acquisition analytics can be used.

The primary step includes identifying the core competencies that are crucial for the success of your business. Then, you can map these competencies against the existing talent, their current capabilities and their potential for growth. Talent gaps, if any, can also be identified at this stage.

The HR team can assess whether the existing resources can be trained to plug the identified competency gaps, or whether new talent with those competencies need to be hired.

2. Recruitment Channel Analytics

Just as important as hiring the right talent, is understanding where the best talent is coming from. Recruitment channel analytics is a process that helps determine where an organization's best employees have been recruited from, and what recruitment channels have been most effective in hiring the right resources for the company.

This analysis includes gaining insights by drilling down into historical employee data, surveys and feedback records and assessing KPIs such as the return per employee and human capital value-added.

3. Classification Analysis To Determine The Success Rate Of Teams

Classification analysis is the process of analyzing historical data to identify patterns that help us predict which category a particular observation or data entity belongs to. In HR, this analytical method can be used to study the composition of a team, and other context variables in order to determine how successful the team will be.

Instead of forming teams merely on the experience, availability of resources, organizations can use insights from classification analytics to understand what other factors such as leadership style, team dynamics and size, the duration of a project, etc, impact the success rate of a team. Being able to determine the success rate of a team beforehand, enables organizations to form the right teams for a project.

4. Attrition Analysis

High attrition is a huge challenge for HR teams and cost intensive for companies. Job postings, recruiting,

onboarding and training are some significant expenses of losing employees and replacing them. This is a bigger problem if you're in a customer-facing business as customers prefer to work with a particular set of people they're habituated with. One way to reduce attrition is by using advanced analytics and NLP to

harness the employee reviews data from employment websites like Glassdoor, Indeed, Comparably etc. This analysis helps you measure the employee satisfaction towards the brand and understand the common factors that lead to attrition.

5. Personalizing Training Programmes

Instead of applying run-of-the-mill training methods and general programs for all employees, the HR team can instead personalize courses to suit the learner's preference.

In order to do so, 'adaptive' learning technology must be used in which data analytics determines the learning pace of the employee, the mode of training, as well as what questions are best suited for them, in order to personalize the course to suit the learner.

6. Capacity Analytics And Utilization

One of the major business benefits of advanced analytics in HR is in cutting down costs. HR teams can use Capacity Analytics to determine:

- What the team capacity is and how much of it is actually being utilized.
- What activities the team is engaged in when they are working.
- What processes, tools, and applications are being used to complete the work and how much they cost the company.
- How operationally efficient the team is – helps determine if the team is either overworked or underutilized.
- The capacity for growth.

7. Improving Employee Performance

Although traditional methods of determining and managing employee performance such as peer and manager review, monitoring KPIs, etc, are globally used, they have not been very impactful in improving employee performance. In fact, a PwC [report](#) on Performance Management highlights that 52 percent of organizations have made or are planning to make changes to employee performance management in the near future.

But with Employee performance analytics, individual employee performance can be measured much more efficiently with the help of both historical and real-time data. Employee performance analytics provides both a retrospective as well as a forward-looking analysis of what employee performance was and how we can improve it. With the resulting insights, we can identify the employees that are performing well and which employees need additional training and motivation in order to perform better.

8. Anomaly Detection Analysis

Anomaly detection analysis is used to recognize unexpected or deviant patterns. In HR management, anomaly detection analysis can help identify relationships between accidents at work and employees who are working longer working hours and possibly fatigued. By identifying resources that work longer than a specified threshold, HR teams could prevent accidents and injuries in the workplace.

Examples Of Companies Using HR Analytics

• UPS Improves Employee Performance And Productivity

An example of a company using HR analytics to improve employee performance can be seen in the logistics giant, UPS. UPS has provided its drivers with intelligent handheld computers that help drivers make better decisions, such as determining which order to deliver parcels in for the most efficient route.

Additionally, the company collects crucial data on the behavior of the driver with the help of more than 200 sensors that are fitted onto the trucks. These sensors record data on everything the driver does, such as whether or not they wore a seatbelt or how many times they reversed the vehicle.

This data is then used to provide feedback to the drivers and suggest improvements or training wherever needed. Another major impact the insights have had is on the revenue of the company – UPS has achieved a reduction of [8.5 million gallons of fuel and 85 million miles per year](#). Drivers are now making more deliveries per day with an average of 120 stops a day as opposed to less than 100 in the past.

Acuvate's Approach To HR Analytics

As a Microsoft Gold Certified Partner, Acuvate helps organizations [implement HR analytics](#) using Azure Synapse, Azure Databricks, Azure Data factory, Azure Machine Learning, and Power BI. With user-friendly and automated reports, our solution helps you leverage the information of employees throughout their life cycle.

If you'd like to learn more about HR Analytics applications and examples of how companies are using it, please feel free to get in touch with one of our HR analytics experts for a personalized consultation.

Get in touch with our experts