

How to apply analytics in Human Resources

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In recent years the Human Resources industry has been revolutionised through analytics. The goal of analytics is to understand the world in ways that make it more predictable. Every HR leader is looking for a way to model and predict employee behavior. General analytics and machine learning have recently become very promising methods of understanding and analysing companies' structures and their workforce. Analytics in HR is transforming how organisations search, hire, train, maintain and retain their employees. How can HR leaders apply analytics to transform their organisations? What are the steps they should follow?

A survey once done by IPC indicated that managers are not applying analytics in their departments because they do not know-how and some mentioned lack of data. However data is now found in every part of the organisation. Data can be found in employee performance records, retrenchment records, recruitment records, etc.

1. What business problems are you trying to solve

The first step in applying analytics in HR is to ask how each area or part of the HR department can be helped by analytics. Some of the questions that may help are; How can analytics help us search and recruit the best talent? How can we use analytics to measure employee performance over time? How can analytics help us measure and engage our employees? How can analytics help us model our workforce so that we can optimise cost, profit and productivity? How can analytics help us return the best employees?

When managers are asking these questions they have to have an open mind. The other best way is to include all the department employees to help in answering these questions. Best solutions usually come from unlikely sources.

From all these questions, HR specialists will then be able to derive Key Performance Indicators that are important to them. These KPIs may include retention rates, employee engagement indices, absenteeism, etc.

1. Research and collect all relevant employee data

It's hard to answer all the above questions without data. One of the most important steps to take when applying analytics in HR is that you only research data that is relevant to the goals of the business.

But where does all these data come from? The data comes from different sources within the HR department and resides across different HR systems, Excel spreadsheets, and paper records. Accessing data across disjointed systems is inefficient and time-consuming. All this data need to be unified into a

central repository. Employee data typically

Once all employee data is consolidated, one can now identify key performance indicators which will help you understand how their performance relates to business outcomes.

1. Experiment with Different Analytical Tools

Once you decide on the KPIs you are going to use and where you are going to get the data, the next step will be choosing analytical tools to use.

With more and more tools becoming available on the market that enable users to merge successful data mining techniques, data transformation techniques and data visuals with a user friendly self-service interface, it is now easier than ever to explore your data quickly and get an action plan together to proceed forward.

Usually many issues arose from lack of data. An article by Visier showed that 44% of companies believed that a lack of adequate investment in HR/Talent Analytical Systems made HR analytics more challenging and 54% said that inaccurate, inconsistent or hard to access data which required too much manual manipulation caused problems also; both of these issues can be easily addressed with the right analytical system and support.

1. Gather the right skilled team

When you are doing the analytics in house, you need to gather or hire a team. The team should include both HR and statistics specialists. This team will transform the business requirements into features and implement them on the back and front-end.

Analytics isn't for everyone. According to a Harvard Business Review Research Project, (data of which can be found here) it was found that 47% of companies believe one of the biggest obstacles that an organization faces when it comes to "achieving better use of data, metrics, and predictive analysis by HR and talent management professionals" is having a lack of analytic acumen or skills among HR professionals.

Team structure depends on solution complexity, budget, and timeline. Some of the team members that must be included in the projects are; HR manager, data engineer, database administrator, data analyst and data scientist.

1. Create data visualisations

To make sense of what you want to build, one need to see the different factors you are assessing. This is called Data Visualisation. Data visualization is crucial to analytics initiative.

You need data visualisation because of the way the human brain processes information. Using charts or graphs to visualize large amounts of complex data is easier than poring over spreadsheets or reports.

Data visualization is a quick, easy way to convey concepts in a universal manner – and you can experiment with different scenarios by making slight adjustments.

Data visualization can also; identify areas that need attention or improvement, clarify which factors influence different human resources KPIs and help in making predictions.

1. Build a predictive model

The central goal of this phase is to develop a model that provides the most accurate predictions for a given question.

Data scientists will be there to check the availability and quality of the data. If data for answering certain questions is not available, they initiate additional data collection. After having prepared data for machine learning, the specialists start model training. Model training is about providing an ML algorithm with historical training data with target attributes (correct answers to predict) or without them.

After all training is done, the models are then tested and evaluated on their accuracy, and the best model is deployed into a software.

When done, the models need to be deployed and automated into a system for everyday use.

1. Train everyone on how to use the system

The end-user training is a must since it's aimed at showing new system functionality. When preparing for training people, take note of user technical skill level before developing training approaches. For instance, documentation written in plain language with explanations of the main concepts and terms and screenshots would be helpful for non-tech users. Video tutorials and interactive on boarding tools that instruct users along the way are also good supplements to the text sources.

In a nutshell these are some of the ways you can do to apply analytics in your HR department. There is a lot that is involved in each step but we tried to summarise it. Analytics in HR department is a competitive advantage that your organisation can enjoy once implemented very well.

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