How to be successful by applying data in HR

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The Human Resources industry is entering an interesting era. It is being introduced to the era of scientific analysis based on smart technologies. Every leader of an HR department or business leader needs to answer this question, "How can data help HR departments work more efficiently and increase organisational success?"

The major changes that are happening in the HR industry are mainly driven by data science. The goal of all data science is to understand the world in ways that make it more predictable. Until now, organizations and their members posed impossible challenges in modelling and predicting behavior. Data science and machine learning become new trends as very promising methods of understanding and analysing companies' structures and their workforce. Data science in HR is transforming how organisations search, hire, train, maintain and retain their employees.

We once surveyed one of our workforce analytics workshops trying to find out why HR managers are not applying science in their departments. Most of the participants mentioned that it is because they do not know-how. However, there are interventions managers can undertake to apply science in their organisations or departments. Science can come in different forms such as machine learning, videos, simple collaboration systems for example asana or Trello, wearable gadgets, etc

1. **Ask the right questions**

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

It's hard to answer all the above questions without data. But where do 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 disjoint systems is inefficient and time-consuming. All these 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 that will help you understand how their performance relates to business outcomes.

1. **Decide on System to use: off-the-shelf or custom**

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 a system to use. When choosing a system, you need to decide whether you are going to use an off-the-shelf system to build your system.

There are many HR systems available on the market that have features for recruitment, onboarding, performance management, payroll and benefits management, employee engagement, etc. These systems Zoho People Plus, Gust, etc.

When it comes to AI-based solutions, the market has a lot to offer as well. For instance, IBM provides AI-powered talent management solutions for talent acquisition, development, and assessment. Zoho People Plus includes the Zia assistant to help HR managers in scheduling interviews, client meetings, or employee orientation events.

The advantage of using an off-the-shelf system is simplicity. You just choose a system, register everyone that will be using and start working. There is no need for development. The provider of the system maintains the system and storage of data.

When you have special requirements and you can't match the functionality you need with any commercial tools, consider designing and developing a custom solution. If you need a tailor-made system you have to assign your developers or consultant.

1. **Gather the team**

When an in-house custom made system is the best option, you need to gather or hire a team. The team should include both HR and Tech specialists. This team will transform the business requirements into features and implement them on the back and front-end.

The 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, data scientist, front end developer, UX designer, and UI designer.

1. **Create an HR Dashboard**

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

functions as a one-stop-shop for all the internal and external HR data. A graphical presentation of all this data will enable organisations to monitor and benchmark the data to derive insights into.

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.

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 the user's 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 onboarding tools that instruct users along the way are also good supplements to the text sources.

In short, these are some of the high-value interventions you can do to apply science in your HR department. There is a lot that is involved in each step but we tried to summarise it. Data science in the HR department is a competitive advantage that your organisation can enjoy once implemented very well.

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