

What is data-driven HR?

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Companies are nothing without the right people. Those companies that are able to attract people with the right skills and talent are most likely to have the competitive edge needed to succeed now and in the future. It is therefore vital that companies put in place the intelligent systems and processes to find, recruit and retain the right people for them. Clearly, human resources (HR) is at the very centre of this need. Yet, in my experience, too many HR teams spend the majority of their time on administration tasks or legal issues. Clunky staff appraisal processes, the day-to-day minutiae of finding and managing people, and wasteful, expensive activities like annual staff satisfaction surveys (more on this in Chapter 8) take up time that could be better spent elsewhere. In addition, HR traditionally is seen as being very people oriented, and not so much about numbers and data. Even when data do play a role, they are not necessarily being used in a smart way that is most relevant to the business in question. A lot of HR data analysis comes in the form of key performance indicators (KPIs) measuring factors like absenteeism or number of training hours per full-time employee, sometimes because these metrics are easy to measure or because they are what other companies measure. These days there are far more unique and valuable metrics that can be measured, metrics that can deliver business-critical insights and have a huge impact on an organization's performance and results.

I am certainly not saying that HR should no longer be about the people who work for the organization. People will continue to be a central driver of success, even in this age of increasing automation, robotics and artificial intelligence (AI). What I am saying is the role of the HR team is changing and, as our ability to gather and analyse ever-increasing amounts of data grows, so too do the opportunities

for HR teams to add more value to the organization and help to achieve its strategic goals. Step forward data-driven HR. In this chapter, I look at what is meant by intelligent or data-driven HR, explore the main ways in which HR teams can use data intelligently and set out how data are already transforming HR functions. I also take a brief look at the role of automation in our increasingly data-driven world and set out what you can expect from the rest of this book.

The rise of data-driven or intelligent HR

Things are changing fast, and our world is becoming more intelligent every day. Nowadays, almost everything we do at work can be measured, from employees' day-to-day actions, concentration, happiness and wellbeing, to wider business operations. This explosion in data means HR teams have at their fingertips more data – and the potential for more insights – than ever before.

What do we mean by data-driven HR?

Data-driven HR, or intelligent HR, is about using this data explosion in a smart way and extracting insights that not only improve the performance of people within the company (including its HR team), but also contribute to the overall success of the organization. HR teams can use data to make better HR decisions, better understand and evaluate the business impact of people, improve leadership's decision making in people-related matters, make HR processes and operations more efficient and effective, and improve the overall wellbeing and effectiveness of people, which all can have a significant impact on a company's ability to achieve its strategic aims. Right now, this idea of the data-driven HR team does not exist in many organizations, outside of perhaps the very largest or most innovative companies, but it is certainly gathering pace. HR and people management are undergoing a revolution, and starting to be taken over by this wave of data and analytics. This part of business functionality that has traditionally focused on softer elements like people, culture, learning and development, and employee engagement is becoming

increasingly driven by data analysis, and with good reason. As we will see in Chapter 2, HR is one of the most data-rich functions in most organizations. Employers have been using data and analytics to some extent or other for a long time now to understand metrics like staff satisfaction. The rise of big data has accelerated this practice, as well as taking it in exciting new directions.

Adding value wherever possible

With intelligent, data-driven people management, the top priority is to add value to the organization and do this in the *smartest way possible*, using all the tools at the HR team's disposal, including data, sensors, analytics, machine learning and AI. HR teams can gain some mouth-watering benefits when they use data in a smart way and apply analytics tools to turn those data into business-critical insights. Take Google's approach to people management, for instance. Google gives staff free meals, generous paid holiday allowances, access to 'nap pods' for snoozing during the day, and space to grow their own fruit and vegetables at work.¹ Now, I am sure Google's leadership team is full of lovely, generous people, but that is not why the company has implemented these policies or, at least, it is not the only reason. These decisions were based on what the data told them would increase employee satisfaction. Google's approach to boosting staff satisfaction thoroughly disrupted the technology world, dramatically changing the way Silicon Valley employers think about employee perks, and now technology companies of all sizes, from the big players to small start-ups, seek to emulate the Google approach. And, while staff turnover is consistently high in the technology world, Google is regularly voted the number one company in America to work for by *Fortune* magazine.²

Is HR as it stands fit for purpose?

A few years ago, I wrote an article questioning whether we still need HR departments in their current form.³ It was intended to provoke debate and perhaps a little controversy, and that is exactly what it did. My point was that HR teams as they typically stand now should be

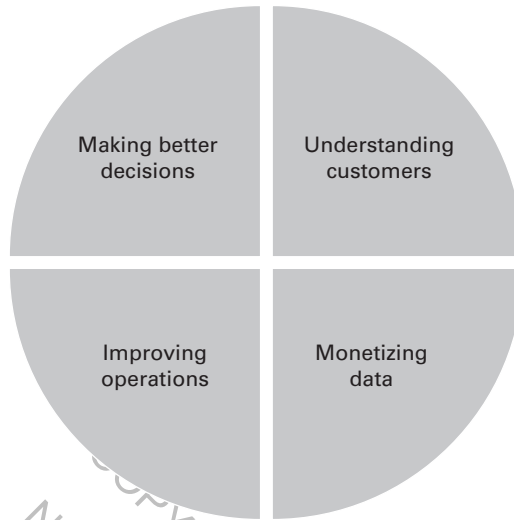
reorganized to deliver greater value, and I suggested restructuring HR into two separate teams: a people support team and a people analytics team. The people support team would, as the name suggests, be charged with supporting employees in the organization, from frontline staff to the senior leadership team. This would involve helping people with their development, monitoring and boosting staff engagement, identifying issues with company culture, and generally looking after employee wellbeing. The people analytics team, on the other hand, would step back from the softer aspects of people management and look at people in a more scientific, analytical way, supporting the company with critical insights that improve performance. The role of the people analytics team would be to find answers to key questions such as:

- What are our talent gaps?
- What makes a good employee in our company?
- How do we best recruit those people?
- How can we predict staff turnover?

Crucially, the answers to the above questions would be based on data, not gut instinct or what works at other companies. I still think there is a case for splitting HR teams in this way, as it provides a clear path to using data more consistently and essentially provides a foundation for intelligent, data-driven HR. You may agree with the two-team approach, or you may not. Either way, as the way we do business is changing rapidly, there is a clear case for HR teams to deliver more value and data provide a way to do that.

Linking to the company's objectives

With the wealth of data at the HR team's disposal, it is well placed to play a critical role in helping the company to execute its strategy and deliver its key objectives. I frequently work with companies to create a 'plan on a page': a simple one-page strategy that is concise and easy to understand. At the very top of this plan on a page is a section that sets out the company's purpose, ie its mission and vision statements. When HR teams are creating their own data strategy (more on this in Chapter 3), that company purpose should again be right at the top. The idea is for the company purpose to inform the HR team's own

Figure 1.1 Data use by businesses

strategy, decisions and activities. In this way, the HR team is creating its own plan of how to help the organization fulfil its purpose. This is what adding value is all about.

How HR teams can use data intelligently

There are infinite ways in which businesses can make good use of data, but, in their most basic sense, they boil down to four main categories (see Figure 1.1):

- using data to make better decisions;
- using data to improve operations;
- using data to better understand your customers;
- monetizing data.

Let us look at each area in turn.

Making better decisions

The idea behind data-driven HR is all about making HR smarter in every possible way and making smarter decisions is a huge part of

this. Data can help HR professionals make better decisions about their own activities (such as smarter recruitment and performance reviews), and HR data also can be used to report to elsewhere in the company and support wider company decisions. After all, leadership teams need HR- and people-related data to make their own decisions, and the intelligent HR team is well equipped to support this process. Currently, much of this data work is done in an ad hoc way or in not particularly efficient ways, such as by utilizing staff surveys that cost huge sums of money.

Improving operations

The second category, improving operations, is perhaps even more vital for HR functions. Data provide a way for HR professionals to look at their key HR functions – like employee safety, wellbeing and recruitment – and answer critical questions like ‘Where do we spend most of our time and effort?’ and ‘How can we streamline and improve these functions?’ Data analysis can help to identify areas for improvement and potentially automate certain processes to make them more efficient.

Understanding your customers

This is one of the biggest and most publicised areas of big data use today. Here, businesses use big data to better understand customers, including their behaviours, their preferences and their level of satisfaction. Using data, businesses can gain a full understanding of customers, such as what makes them tick, what they will do next and what factors lead them to recommend a company to others. Organizations can also better interact and engage with their customers by analysing customer feedback in order to improve a product or service. If you are thinking this category is only of interest to your sales and marketing colleagues, think again. As an HR professional, your company’s employees are your customers. This means you can use data in much the same way as a marketing team would to better understand and interact with your customers.

Monetizing data

There is also a fourth use of data that is common in business, and that is monetizing data to create a new revenue stream for the company. One good example of this is Jawbone, the company that manufactures the UP fitness tracker band. With millions of users, Jawbone gathers an incredible amount of data, and it did not take the company long to realize that all the data it collected were more valuable than the device itself.⁴ Analysing the collective data brings insights that can be fed back to users and sold to interested third parties, creating a new revenue stream over and above the original product. Jawbone still manufactures UP bands, as they are the vehicle for continuing to collect data, but the data themselves are now the company's primary focus. While monetizing HR-specific data is unlikely to happen (there would be so many ethical issues to contend with concerning selling employee data), it is worth HR professionals being aware of this data use. For instance, your company may decide to start monetizing data from other areas of the business (such as customer or product data) and this would impact on the business's overarching strategy in the future. This, in turn, may impact on HR in terms of the changing skills that the company needs to recruit for, and how HR can best add value to the organization's changing strategy.

How data are already revolutionizing HR functions

If we look at the core HR functions, there are very many real-world examples of how this idea of data-driven HR is already taking root.

Taking the guesswork out of recruitment

In recruitment, for example, taking on a new employee represents a huge investment for most companies, particularly in a professional or managerial role. So, in an age where everything can be measured, quantified and analysed, data help to take the guesswork out of recruitment (more on this in Chapter 7). Rather than relying on gut feeling

or assumptions about background, education and experience, taking a data-driven approach to recruitment helps companies to find staff who are better suited to the role and the organization, who stay happy and on the job for longer. In one very simple example, one of my clients wanted to recruit self-driven people with a strong sense of initiative. By analysing different data sets from the type of people they wanted to attract and those they wanted to avoid, they found that the type of browser used to complete the job application was one of the strong predictors for the right kind of candidate. Those who used browsers like Firefox or Chrome that were not pre-installed on their computer tended to be better suited to that particular job. This simple insight helped them to dramatically streamline the recruitment process.

In another example, a bank was able to cut staff costs, and recruit a better calibre of employee, simply by analysing the performance of staff that were recruited from different universities. In the past, the bank had been recruiting on the basis that the best-performing people would be those who held top degrees from Ivy League universities. Instead, they found that candidates from non-prestigious universities outperformed the Ivy League candidates.

Understanding and boosting employee engagement

In employee engagement, some organizations are starting to use analytics tools to scan and analyse the content of e-mails sent by their staff, as well as what they post on Facebook or Twitter. Many more are using short 'pulse' surveys to measure how staff are feeling on a monthly, weekly or even daily basis.⁵ This allows them to accurately gauge levels of staff engagement, without the need for traditional costly and time-consuming staff surveys. You can see examples of data-driven employee engagement in Chapter 8. Clearly, there are privacy implications concerning accessing employee communications, and the rules vary from country to country. Turn to Chapter 6 for more information on privacy implications.

Improving employee safety and wellbeing

Employee safety and wellbeing are being improved thanks to developments like Fujitsu's Ubiquitousware package, which collects and

analyses data from devices such as accelerometer sensors, barometers, cameras and microphones to measure and monitor people as they go about their work.⁶ Data such as temperature, humidity, movements and pulse rate can be used to identify when workers are exposed to too much heat stress, for instance. The system can even detect postures and body movements to sense a fall or estimate the physical load on a body. Find out more about data-driven employee safety and wellbeing in Chapter 9.

Transforming learning and development

In learning and development, the rise of online courses has revolutionized how companies develop their people, and allows high levels of personalized learning that is tailored to the individual. Because every move a learner makes in an online course environment can be easily tracked, it is simple to measure how they are responding to the course material; for example, is one learner taking much longer to complete a unit than they did on previous units? If so, that indicates they may need extra information on that particular topic. Others who breeze through content quickly may benefit from more advanced learning materials. These are just some of the ways in which learning can be personalized. Find out more about this and the many other ways in which data are transforming learning and development in Chapter 10.

Measuring and boosting employee performance

In performance management, data are helping companies to measure employee performance more accurately and review performance in a smarter, more agile way. One often-cited example is Xerox. The office equipment manufacturer asked an analytics firm to monitor staff performance and come up with the profile of an ideal candidate for its call centres. The surprising findings showed that previous call-centre experience was no indicator of success, and that candidates with criminal records often performed better than those without. The experiment led to a reduction in staff turnover of 20 per cent.⁷ Turn to Chapter 11 to see the many other ways in which data are helping to drive people performance.

Looking to the world of sport for clues

In many ways, the world of sport provides an interesting analogy for what HR teams should be doing with data, as well as showing where HR might be going in the future. Particularly at the elite level, there is incredible pressure to be on the cutting edge of analytics. The GB Olympic rowing team – the only GB team to have won gold in every Olympics since 1984 – is just one example of a top-flight team that has been ramping up its data analytics.⁸ Like HR, rowing is intrinsically analytics friendly. Most of what the athletes do can be measured, just as much of what employees do can now be measured. Two main uses for data in rowing are talent identification and talent tracking. For example, by collecting every bit of datum about every athlete who enters the training programme, new talent can be matched against profiles of former entrants, to identify the approach most likely to turn each individual into a champion. It is not hard to draw a parallel with HR activities, where data have the potential to track employees' activities and progress, and help to tailor development programmes to suit specific individuals. Data also help the rowing team to prevent injuries. Warning signs can be highlighted across all data sets – physiology, gym, medical, race performance etc – and matched with past data to show when an athlete is in danger of pushing themselves too hard and causing an injury. Likewise, as we have already seen in this chapter, organizations can use data to enhance their employees' safety and identify when individuals might be in danger of injuring themselves.

Across all sports, athletes and coaches are increasingly working with data and analytics to extract every possible insight that could lead to improved performance, and I see a similar thing happening with each function in organizations, particularly HR, which is so rich in valuable individual data.

A (brief) word on automation

There has been a lot of talk about the rise of automation and the threat this brings to jobs. From factory line jobs to professions like

accounting and architecture, AI technologies like machine learning – where a computer ‘learns’ from what the data are telling it and adapts its decision making and actions according to what it has learned – mean that increasingly more tasks now can be automated and completed by machines or algorithms. Fields like marketing, manufacturing and even healthcare have been strong adopters of machine learning and AI – HR less so. But, as we will see in Chapter 2, a lot of HR tasks now can be automated. In many cases, machines can perform a task to a much more accurate degree than a human can. Algorithms can predict employee churn better than a human ever could, for instance.

In its annual HR survey, recruitment firm Harvey Nash concluded that AI and automation will have a major impact on HR over the next five years. The survey found that 15 per cent of HR leaders were already affected by AI and automation, while 40 per cent thought it would impact on them in the next two to five years.⁹ Looking further ahead, a recent Oxford University study calculated how 720 jobs would be affected by automation over the next 20 years.¹⁰ The study concluded that, by 2035, HR administrative jobs had a 90 per cent chance of being automated. HR officers, managers and directors, however, were much less likely to be replaced by robots.

How would automation work in practice? One good example is virtual helpdesk agents – chatbots, essentially – that could answer simple employee questions such as: ‘When is the company closed over the Christmas break?’ or ‘How much of my annual leave have I used already this year?’ AI technology is now so sophisticated that it can respond to natural, spoken language, rather than typed questions, and even detect the underlying sentiment behind the words themselves. Call centres, for example, are using this technology to analyse whether a caller is satisfied, frustrated or angry during the course of their call. So, it is clear that HR will be affected by automation over the next few years; however, in the context of intelligent, data-driven HR, this can be seen as a very positive development. Automating the simpler, administrative-type tasks frees up HR professionals to focus on more important tasks that align with the company’s strategy and help to deliver performance improvements.

How to use this book

The goal of this book is to explore the key ways in which data and analytics can drive performance, both in terms of the HR team's own performance and value within the organization, and in terms of how data-driven HR can help to drive performance right across the business. I think of this book as a journey, looking at the developments that have brought us to this point and identifying a path forward for HR professionals. With this in mind, the second part of the book (Chapters 3–6) is about lining up the building blocks of intelligent, data-driven HR, including creating a data strategy, sourcing HR-relevant data and turning those data into insights. We will also look at some of the potential pitfalls and concerns surrounding using data, including privacy issues and the need for transparency. As we will see in Chapter 6, the way in which a company uses data, and how that use is communicated to staff, has a big impact on how people react. Ill-considered, poorly communicated or discriminatory uses of data erode trust, and can be extremely harmful to morale. Thankfully, there are plenty of ways in which HR teams can mitigate these potential issues and gain employee buy-in, and we will look at some of these in Chapter 6.

The third part of the book (Chapters 7–11) looks at data-driven HR in practice, and how data can drive operational improvements and better decision making across all the core HR functions: recruitment, employee engagement, employee safety and wellbeing, training and development, and performance management. I cannot stress enough how all these functions are already being transformed by data and analytics. In these chapters, I am not making wild predictions about potential future developments. The future is already here. The challenge facing HR teams today is how to keep up with developments and continually evolve to ensure maximum value to the organization. I hope that the real-world examples given throughout this book, showing how companies across all sectors are using data in incredible ways to optimise their people-related decisions and operations, inspire you to tackle this exciting new world head-on.

Key takeaways

At the end of each chapter I will be summarizing the critical learning points that have been looked at. Even if you only manage to skim over certain parts of the book, these key takeaways will give you the absolute must-have information in one simple list. Following is what has been covered in this chapter:

- Almost everything we do at work now can be measured, from employees' day-to-day actions, happiness and wellbeing, to wider business operations. This explosion in data means HR teams have at their fingertips more data than ever before.
- Data-driven HR means taking advantage of this data explosion to extract insights that not only improve the performance of people within the company (including its HR team), but also contribute to the company's overall success.
- With intelligent, data-driven people management, the top priority is to add value to the organization and do this in the *smartest way possible*, using all the tools at the HR team's disposal, including data, sensors, analytics, machine learning and AI.
- There are many ways in which businesses can make good use of data, but, in their most basic sense, they boil down to three main categories:
 - using data to make better decisions;
 - using data to improve operations;
 - using data to better understand your customers.

Now, let us start our journey into data-driven HR by exploring how we got to this point, where almost everything we do, both inside and outside the work setting, leaves a digital trace that can be mined for insights. In the next chapter I look at the evolution of data-driven HR, and how the explosion in big data and analytics technologies, including AI, machine learning and the Internet of Things (IoT), is making HR more intelligent than ever before.

Endnotes

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