MERCER’S LESSONS FOR SUCCESS IN WORKFORCE ANALYTICS

If 2013 has produced a breakthrough technology phrase, it is “big data”, a fairly vague but forceful term that features in just about every article, column, or blog touching on the subject of capturing and analysing the ever-rising tide of digital information. Big data, in the context of HR and talent analytics, is again emerging as one of the hottest topics in 2014, with the Chartered Institute of Personnel and Development (CIPD) recently announcing that “talent analytics and big data are now must-have capabilities in HR”.

Organisations are eager to mine their stores of big data to unlock workforce insights, and the presumed benefits are tantalising: if an HR function can target human capital investment with precision and anticipate future issues, then there will be less wastage due to poor decision-making and better investments in proactive HR interventions. An HR function that can translate people and performance data into insightful recommendations on how to best forecast, engage, mobilise, reward, and assess the workforce can position itself as a competitive advantage within its organisation and secure its position as a critical player in the boardroom.

We have watched organisations increasingly consider workforce analytics as a way of managing their talent efficiently and, ultimately, more proactively. This interest continues to be fuelled by the volume of data becoming available, and the intensity and sophistication with which this data is being used is indeed novel.

However, is HR in danger of getting lost in the fog of big data?

At Mercer, we observe that many organisations’ big data journey in workforce analysis starts with a data clean-up, a large-scale investment in technology, and a search for automated predictive analytics. We believe that a different focus is needed. In this article, we share our perspective and insights regarding what HR functions need to do in order to use data to truly connect to the business and people strategy.¹

TIP #1: START BY DETERMINING THE IMPACT — DON’T START WITH THE DATA AT HAND

We find that HR functions’ typical process when they start using data analytics follows a general pattern.

Companies should first collect the available data (typically HRIS data). Then, they will need to spend a lot of time cleaning up, recoding, and normalising that data. Next, they should select the metrics to focus on, typically based on a list of best-practice KPIs. Based on these metrics, the next step is to design reports and dashboards to deliver to the business.

This process can take a substantial amount of time as dashboards are created and communications are issued to the business. Unfortunately, this enormous investment of time and effort is often wasted and the process begins to fall apart when HR and business leaders are left to analyse the metrics and then use them to support proposals being presented to general management. After some time, the company reflects on what impact the process of big data analytics has had, and the results are often poor. Few organisations are able to show the impact of big data analytics — and, if they are able to show the impact, rather than creating a process that is embedded, consistent, and repeatable, they find themselves left with a process that is haphazard and managed inconsistently by random sections of the organisation.

Instead, the key to a successful workforce analytics programme is to start by focusing on the impact of the data you collect and the analysis you will undertake. These elements can be identified by determining the critical workforce questions that you hope to solve, without being constrained by the data that is currently available. Essentially, your workforce metrics and analytics are only as good as the questions and resulting data that generated them — otherwise, the metrics and analytics can produce “data smog” and misleading results.
Critical questions can be generated by interviewing your senior leaders to understand their perspective on the following:

- Which skills/talent groups can be developed internally? Which groups need to be “bought” from the outside?
- Which talent groups or categories will be critically important to achieving your strategic goals?
- What do you believe are the biggest people challenges created by the company’s business strategy?

These questions will also help to ensure that the analysis is more focused and valuable. For example, the first question can help to identify a “talent risk” by highlighting a weak pipeline for the future, or, if there is a shortage of hot skills, this may indicate growth concerns.

Another way of determining impact is to consider the focus of the current people strategy. Is the organisation investing in leadership development programmes to help develop high-potential talent, a pay review to help reduce employee turnover in certain high-turnover roles, wellness programmes to decrease stress and improve productivity, or international mobility programmes to help retain key talent segments? If so, what assumptions are being made about the impact of these programmes and does this impact need to be tested through data analysis?

**TIP #2: DON’T BE SHY ABOUT COMBINING MULTIPLE DATA SOURCES**

There is hardly a shortage of elements to measure, but determining which specific metrics will help you connect practices to workforce and business outcomes is not easy. Many HR functions feel overwhelmed by the volume of data available to them and, consequently, they rely too heavily on their HRIS. When HR leaders do use metrics, they are frequently tried and trusted metrics specific to the HR function itself. HR leaders also tend to consider undertaking analysis only in areas where they know they can actually produce the data. The CIPD survey shows that only half of senior HR leaders actually think that they link HR data to key business data, which suggests that this is one of the biggest challenges for HR to overcome.

HR functions have historically focused on the information available in their HRIS, but this is just the start. Information can also be sourced from engagement surveys; exit surveys; talent management programmes; industry benchmarks; and recruitment, compensation, benefits, wellness, learning, and financial data. Mercer believes that, in most cases, combining one or two relevant fields of information from multiple systems will be more valuable and insightful than perfecting all the data in one system.

This is not easy. However, organisations that want to be successful in workforce analytics should spend at least as much time thinking through what to analyse and how to combine multiple data sources as they do on data clean-up of the main data system.
TIP #3: ENSURE THAT DATA IS BROUGHT TOGETHER IN A WAY THAT IS MEANINGFUL FOR ANALYSIS

Big data highlights the volume, variety, and velocity of data that is now available as a result of advances in technology. However, the challenge of combining data sources in a way that is meaningful for workforce analysis remains.

Big data is a trend that will continue to be applied in HR; however, focusing on the technologies available to process the data is not necessarily the best option when thinking about workforce analytics. Big data is frequently understood in terms of volume, velocity, and variety, but not all of these are applicable to workforce data. Workforce data is not as plentiful as consumer or fraud data and, at least at present, the growth velocity is lower. For example, a company may hire a thousand people over the course of a year, resulting in a thousand new personnel records, but a sales function may produce hundreds of thousands of customer transactions in one day.

Instead, we consider “long data” techniques more valuable to workforce analytics. The term long data was coined by the mathematician and network scientist Samuel Arbesman to describe “data sets that have massive historical sweep”. The benefits of a long data approach are that it allows organisations to identify and analyse data as part of an ongoing process, thus avoiding the risks of making reactive or point-in-time decisions. The applicability of this approach to HR functions is clear. When considering workforce issues, HR professionals are often more focused on trends and impacts that occur through time: do we offer our employees a defined career path? What are the best experiences to help accelerate the development of our future leaders? Will a wellness programme have a long-term impact on the productivity and retention of our workers? What recruitment sources produce our best-performing employees one, two, and three years after hire? Do we have a pay-for-performance culture? HR needs to take an analytical approach that can combine multiple sources of data in a way that allows it to build a picture over time, rather than a series of point-in-time snapshots.

The difference is clear when considering the concept of retention and pay of high performers. The retention of high-performing employees is a key issue for HR leaders, but identifying these employees is difficult.

Figure 3
A Better Approach to Data Analytics

<table>
<thead>
<tr>
<th>Mercer Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Smith</td>
</tr>
<tr>
<td>Employee EE001101</td>
</tr>
</tbody>
</table>

- **February 2009**
  - Employee hired

- **November 2010**
  - Performance review 1, compensation adjustment

- **November 2011**
  - Performance review 2, compensation adjustment

- **November 2012**
  - Performance review 3, lateral movement, compensation adjustment

- **March 2013**
  - Sustained high performer

Hired | 2010 | 2011 | 2012 | February | March | Now
In our example, John Smith was hired in 2009 and was identified as a high performer in November 2010 and November 2011. In November 2011, John was promoted. John then subsequently received a medium rating in his next performance review in November 2012. A point-in-time data approach that looked at discrete moments in time would not identify John as a high performer when looking at any metrics in 2012 or even in 2013 (such as “retention of high performers”). Generally, however, a medium performance rating in the year after promotion may be fully expected. But when the longer view is taken, the organisation may still want to categorise John as a high performer. By using a long data approach, HR can create an employee segment that looks at three or more performance ratings and then determine whether an employee is considered a sustained high performer.

Analysing data over time can therefore provide far more valuable insights than can a static examination at a point in time.

**TIP #4: TELL A STORY**

The CIPD’s HR Outlook Survey 2012–2013 suggests that HR professionals are significantly lacking in the ability to be data-driven and evidence-based in their decisions; 63% of HR leaders think they draw insight from data but only 20% of their non-HR business counterparts share that confidence.

Technology makes it possible to generate a large quantity of data, but it is essential that HR leaders remember that the most important parts of the process are the insights that they draw from the collected data and the resulting recommendations and actions that are proposed.

The key to success is to ensure that the specific methodology adopted can be well-articulated and well-communicated to the different audiences that will use the data outputs. The best approach is to tell a story and support the story with your data. This is the aspect of workforce analytics that has troubled HR functions the most, and yet this is the area in which HR analytics groups spend the least amount of time.

Displaying graphs on employee retention is not as effective as describing what the data means and articulating the conclusions to be drawn for the business, but there is more to presenting the information than that. Professor Kerry Mallan showed that stories differ from other narratives (arguments, scientific reports, articles, etc.) in that they orient our feelings and attitudes about the story content. Telling a story can be a particularly powerful tool for HR leaders who have to present the results of their analysis to management.²

**CONCLUSION**

Using the process outlined in this article can have a multiplicative effect that can drive action and results by encouraging non-HR personnel to buy into the recommendations that HR leaders propose. It ensures that there is a strong business case for human capital investment based on factual grounds, and that it speaks to the realities of the organisation.

The advancements in data, systems, and technology provide a great opportunity for HR to get a better understanding of their workforce and the interventions that will be most

---

effective to engage, mobilize, reward, assess, and develop their workers. However, these are merely tools, and organisations will only be successful in their analytics investments if they focus on what matters. They must combine data from multiple sources, and combine it in a way that is meaningful for workforce analysis, and take the time to develop a story or dialogue around what the data is actually telling us.

ABOUT THE AUTHORS
Julia Howes is Mercer’s product line leader for the Mercer Analytics and Planning Centre of Excellence and the product manager for Mercer Analytics. Based in London, she can be contacted at +44 20 7178 6998 or julia.howes@mercer.com.

Joanna Montanaro manages client solutions in Reward and Talent Management at Mercer. Based in London, she can be reached at +44 20 7178 3693 or joanna.montanaro@mercer.com.

Hayley Winter is an analyst in the Mercer graduate programme. Based in London, she can be reached at +44 20 7178 5226 or hayleywinter@mercer.com.