

Why HR is set to fail the big data challenge

LSE blogs.lse.ac.uk/businessreview/2016/10/26/why-hr-is-set-to-fail-the-big-data-challenge/

10/26/2016



Image by [Unsplash](#), under a [CC0](#) licence

Analytics has become a key issue in the HR world because increasing amounts of data about the people organisations employ is being held on human resources information systems (HRIS). Potentially, this could be used to make better data-driven decisions about HR and staffing strategy. For example, Maersk Drilling were able to identify the critical role of leadership in their off-shore drilling teams; managers who received more positive evaluations from their employees managed teams with lower levels of turnover and absenteeism, which resulted in better trained teams who operated their drilling rigs more efficiently with fewer accidents and maintenance time. The analysis led Maersk to focus more attention on selection, training and development of their key middle managerial talent.

Despite the potential suggested by this example, few organisations have made much progress in developing Maersk's level of HR analytics capabilities. Our research suggests two key reasons. First, there is a lack of understanding of analytical thinking on the part of the HR profession. Many HR professionals are motivated by an interest in people, not data. Second, this lack of understanding is being compounded by the HR analytics industry, which is focused on offering complex products for data management, storage and reporting, which consume large amounts of money and time to develop, without offering the capabilities to perform more than simple strategic analyses. Government regulation may also play a role. Maersk are headquartered in Denmark; Danish companies are required to report annually on how people contribute to value creation. This regulatory push could help to explain why they are one of the pioneers in the field.

Organisations don't need expensive software or data warehouses to get started on HR analytics, an Excel spreadsheet will do. However, in many organisations, HR analytics is seen as something that will happen once the data warehouse has been built. Even after this happens, progress to the sort of analytics that asks the big strategic questions about people and performance has been limited. Management information and business intelligence professionals who operate the data warehouses do not necessarily have the skills or mind set to move from data management, organisation and reporting to strategic analytics of the sort practised by Maersk, and they typically have other priorities, servicing other areas of the business.

This matters because if HR professionals don't know and understand their data, the credibility that data brings will reside with finance and operations management instead. It may also damage the quality of working life and employee wellbeing, without delivering competitive advantage for organisations. MIT professor Zeynep Ton has shown how the introduction of enterprise resource planning software led to many large retailers cutting back on their in-store workforces to save costs. This increased insecurity and in-work poverty for many workers, a scenario we see played out daily in headlines about zero-hours contracts. However, in the organisations Ton studied, cost-cutting failed to have the desired effect, because sales fell too as customer service declined.

What can HR do to grasp the opportunities that analytics offers while avoiding the threat of marginalisation that it brings? First, HR professionals need to develop an analytical mindset. What are the key business issues that people management factors are likely to play a crucial role in? Is turnover making it hard for the business to grow? Would the business benefit from offering more training in response to skill shortages? Is there unexplained variation in the performance of different business units that might be down to people? Once the problem has been defined, it is easier to start mobilising resources to use data to address the problem. The next step is to build an analytical model. This simply means going through a process of trying to think of the causal factors that underlie the problem being addressed. Then it is possible to identify the data needed to operationalise the model and answer the question.

After this process of model building, HR professionals need to get to grips with the more mundane issues of data management and governance. Does the data do a good enough job of measuring the thing it is supposed to measure? If it doesn't, what changes need to be made to data governance to ensure that information is carefully recorded in the future? What data from other parts of the organisation are needed to add to the HR data to do the analysis? Will the owners of this data co-operate? The next problem is one of analytical skills and capabilities. Most organisations do not have people with expertise in the statistical software packages, like R and Stata, necessary for more advanced strategic analysis. Collaborations with academics may be one route to acquiring this expertise, contracting in commercial research companies may be another.

♣♣♣

Notes:

- *This blog post is based on the authors' paper [HR and analytics: why HR is set to fail the big data challenge](#), in *Human Resource Management Journal*, Volume 26, Issue 1, January 2016, Pages 1–11*
- *The post gives the views of the author, not the position of LSE Business Review or the London School of Economics.*
- *Before commenting, please read our [Comment Policy](#).*

Andy Charlwood is Professor of Human Resource Management at the University of Leeds. His main research interests are in the areas of job quality and well-being at work, employee voice and working time. He is also interested HR analytics and the ways in which within organisation analytics and data analysis are changing HRM. His research is interdisciplinary in its approach, drawing on ideas and methods from the sociology of work and employment, work psychology and labour economics. If you want to know more about how HR analytics might work in your organisation, perhaps with a view to collaborating, he is always interested in learning more about how organisations are developing and utilising HR data, please get in touch. Email:

a.charlwood@leeds.ac.uk



Mark Stuart is the Montague Burton Professor of Human Resource Management and Employment Relations and Director of the Centre for Employment Relations Innovation and Change (CERIC) at the University of Leeds. His research interests include skills formation, organisational change and representation at work. He has published more than 130 books, monographs, chapters, articles and reports and led more than 40 externally funded projects. Previous external roles include the President of the British Universities Industrial Relations Association (BUIRA), Editor-in-Chief of the BSA journal *Work, Employment and Society*, and Chair of the International Section of the (American) Labor and Employment Relations Association.



Ian Kirkpatrick is the Monash Warwick Professor of Healthcare Improvement & Implementation Science (Organisational Studies) at Warwick Business School. Ian joined Warwick in May 2016 after previously working at Leeds University Business School, where he served as Director of the Leeds Social Science Institute. In this capacity he helped to establish the ESRC funded Consumer Data Research Centre and was a founder member of the Leeds Institute for Data Analytics. His research interests are in the management, organisation and performance of health services, both in the UK and internationally. Ian has made use of a variety of routine and administrative data sources to profile the nature and effectiveness of management and governance in the UK NHS and other health systems (including Spain and Italy). Ian has published this work in leading journals. He also recently served as Chair of Framework 7 European COST Action, and sub-editor of the British Sociological Association journal, *Work, Employment and Society*.



Mark T Lawrence is an independent consultant focused on Strategic HR and Data-driven Transformation; he is also Director of Research and Development at Growth Business Portal, Ltd. As a founding member of the CIPD's HR Analytics Steering Group (and, formerly, supporting the Chief Learning Officer Magazine's Business Intelligence Board and the Human Capital Executive Research Group), Mark has held an interest in the use of data for people-related insights for over 15 years. Mark has worked with companies including PwC, IBM and Marks and Spencer, and holds an MBA (corporate strategy and entrepreneurial management) from Leeds University Business School. Connect with Mark via LinkedIn, or Twitter (@MTLawrence).



- Copyright © 2015 London School of Economics