

THE EMERGENCE OF BIG DATA

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THE ROLE OF ANALYTICS IN BUILDING THE HIGH PERFORMANCE WORKFORCE



The emergence of the concept of “big data” has revolutionised many aspects of business including human resource management. The human resource management branch of what is generally called business analytics, is “workforce analytics”, “human resource analytics” or more recently “talent analytics.” As in other areas of business, the primary driver of HR analytics has been the increasingly digital nature of the workplace reflected in the use of various forms of technology. This has vastly simplified the process of capturing larger volumes of increasingly reliable data about work behaviours and the factors that influence these behaviours.

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Human Resource Management has long had a tradition and well-deserved reputation for making decisions on the basis of sentiment and gut feeling. Efforts to measure work date back at least to Frederick Taylor's time and motion studies beginning in the late 19th century. When it comes to data-driven decision-making, however, human resource management has tended to lag behind other areas, such as finance and marketing. The dramatic shift towards strategic human resource management over the last 30-odd years has been in large measure an effort to address that gap. A substantial part of the work in the field of Strategic Human Resource Management has focused on the creation of what are called high performance work systems. Since the 1980s, this term has been used to describe a bundle of synergistically aligned human resource management practices, specifically designed to advance the strategic goals of the organisation and particularly to permit the achievement of sustained competitive advantage. In modern organisations this calls for carefully co-ordinated strategies for talent management, compensation, organisational learning and the management of the culture and climate of the organisation to promote employee engagement.

BIG DATA AND HR ANALYTICS

There has been a dramatic increase in the volume and variety of data generated across the human resource lifecycle as a result of increasing digitization in the workplace (see fig 1.). These data assets represent a huge potential source of value for the profession and the increasing availability of powerful user-friendly software has opened the way for greater reliance on the "evidence-based" decision-making that enables high performance work systems. Recruitment analysis, for example, taps into a variety of internal and external data sources from LinkedIn profiles, social media channels, applicant tracking systems and labour market data to optimize the talent matching process. Modern integrated HRIS/Payroll systems digitize many of the interactions between

employees and the organization that are generated from time, absence and payroll data, to survey, social and collaboration/workgroup data. Mobile phone and vehicle tracking systems allow organizations to schedule, monitor and optimize employee and vehicle assets, especially for mobile workforces. Performance management and learning management systems enable the integrated planning, tracking and analysis of employee development and performance management programmes to optimize workforce productivity and enhance the leadership pipeline.



Figure 1. Big Data sources in the Digitized workplace

Open source technologies and cloud computing have made workplace digitization increasingly accessible to both large and small businesses. However, it is not sufficient to rely on IT to produce the report, build dashboards or conduct analyses on demand. Research (Deloitte/Bersin (2013) High-Impact Talent Analytics: Building a World-Class HR Measurement and Analytics Function) shows that the majority of organizations are still only at the early stages of HR Analytics maturity, focussed (at best) on operational reporting for measurement of efficiency and compliance (Pease, Boyce, & Fitz-enz, 2012).

HUMAN RESOURCE ANALYTICS IN THE CARIBBEAN

Recent work carried out by researchers from the Mona School of Business & Management suggests that there is a high degree of appreciation, among major Caribbean human resource leaders, of the need for measurement in HR. Not surprisingly however, companies are at different stages in terms of their adoption of human resource

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information systems and other technologies that would facilitate the capture and use of workforce data for optimising human performance. Many HR leaders appear to be concerned primarily to justify their "seat at the table" and even the top HR leaders continue to rely on the anecdotal evidence to affirm their value to the business. At best, they are focused on metrics rather than analytics. ▶▶

There are many reasons for this. One is that some HR leaders simply lack the appropriate strategic mind-set. Some, who came to their professions at a time when the imperative was to maintain industrial peace by managing the relationship with the trade union and taking care of worker welfare issues, have mastered the narrative of strategic human resource management but are yet to adjust to the practice.

The other constraint is size. Conglomerates like Massy, Ansa McAl or Grace Kennedy and Company, are not only small by global standards but are divided into much smaller business units. These individual companies often join the larger conglomerate through a process of inorganic growth and bring their own culture and management systems. Historically, enterprise management systems (including those that support human resource management) have been scaled for larger more integrated global corporations. As such they were expensive to acquire and upgrade, and inflexible to the needs of small regional businesses.

The emergence of cloud-computing and the increased maturity and acceptance of open-source solutions, promise to change this situation. Cloud technologies

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eliminate the need for small companies to invest in expensive infrastructure that requires upgrade every few years, while open source software provides the opportunity for affordable access to customised or purpose-built solutions to suit their specific needs.

The recent MSBM research on Caribbean organisations suggest that major Caribbean companies are only just beginning to explore the use of human resource management systems that are integrated with their larger enterprise management technologies. To truly realize the value potential of workplace digitization, HR

leadership must commit to building the analytics capabilities within the HR function that leverages their own internal domain expertise and the understanding of their specific business context. This may require significant investment in finding or developing the right skills sets, integrating the organisation's systems and data, resolving data quality issues and building effective toolsets. It requires, most importantly, HR leadership with a strategic mind-set, sufficient understanding of the business and sufficient stature to negotiate a role and position for HR technologies in the overall enterprise management architecture.

THE FUTURE OF HR ANALYTICS IN THE CARIBBEAN

HR management and professionals in some progressive Caribbean organisations are awakening to these possibilities. Accordingly, they have been moving slowly from occasional or anecdotal evidence of performance, to embrace human resource analytics.

An example of how open-source technology has helped to advance the culture of evidence-based decision making comes from a major financial institution based in Jamaica. In a recent upgrade of their performance appraisal system, the company began by harmonising the appraisal period of all employees to match the financial year. This enabled the organisation to connect key result indicators (KRIs) for each job to overall business goals in a cohesive and consistent way. Secondly, it allowed a closer examination of how individual performance was affecting the performance of the business at various levels. The organisation was therefore able to match major organisational outcomes to individual performance, reward where warranted and take corrective measures where necessary.

For example, it became much easier to measure supervisory effectiveness in the appraisal process. According to the Deputy General Manager, Human Resource "if a supervisor has appraised 20 people and all of his appraisals fall within a 3% range we want to talk to him" with a view to improving his rating skills. Targets

can be allocated to revenue generating areas such as retail banking and corporate banking. These targets are aligned to the size and the complexity of the branch. Branch Managers know the target for the branch and both the manager and the team member reporting to that manager have access to performance indicators. This means that in the event of a shortfall, both the human resource department and the head of the business unit can immediately identify the source and take corrective action.

Technology is also beginning to re-define organisational learning in the Caribbean. Learning management systems allow for training on-demand and mitigate traditional distance and travel logistics barriers. The company to which we referred earlier has migrated the majority of its corporate learning interventions to technology-driven learning management systems based on open-source platforms. Aside from being operationally cost-effective, this approach allows employees

to work on their own time and at their own pace. Learning outcomes can be easily monitored by the human resource department and, reward and promotion can be linked to learning. Simultaneously the organisation is able to maintain comprehensive data on the skills and competencies of employees, making it easier to determine who can be deployed to job openings as they arise. As Caribbean companies expand and begin to function across borders, the ability to make these kinds of decisions becomes particularly crucial.

CONCLUSION

More than 30 years after the emergence of strategic human resource management, the field continues to be plagued by the Rodney Dangerfield problem; they “don’t get no respect.” However, bolstered by the emergence of the “big data” phenomenon and the increasing application and sophistication of HR Analytics, strategic human resource management is poised to demonstrate a tangible impact on the business bottom line. This advance has been helped significantly by the emergence of cloud computing, and the new possibilities ushered in by the growing use of open source technologies. Caribbean businesses are beginning to embrace these technologies as a means of creating high performance work systems. Maximizing the impact of human resources on business performance will require strategic HR leadership, supported by multi-disciplinary teams that combine HR generalists and data scientists to harness the potential of big data and HR analytics. ■

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