

Human Resource Analytics: The modern tool in HR for concrete decision making

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Abstract:

HR Analytics is an emerging discipline that can help enable HR to fulfil the promise of becoming a true strategic partner. Though there has been a proliferation of HR metrics and scorecards in recent years, HR needs the power of analytics to differentiate which measures matter. Through use of HR Analytics, Lowes was able to establish that highly engaged employees lead to 4% higher average customer ticket sales per store. Without a doubt, mastering the art and science of HR analytics takes effort. Two of the descriptions are more specific in that they list specific components of HR Analytics, either specific analyses or specific practices. So, to summarize, the benefits of HR Analytics are supporting peoplereLATED decisions and data driven policy making. The research should also focus on a more quantitative approach to the research with the aim of observing predictive modelling as an aspect of HR analytics on an organizational setting.

Keywords: Big Data, HR Analytics, Decision making, Predictive Analysis

1. Introduction:

'It's hotter than not! HR professionals are clamouring for "analytics"-the magic numbers that will help them combat attrition, hire the highest of high performers and predict the future success of the organization. We are seeing the surge of interest in analytics as one of the very top initiatives in HR today. Technology providers are embedding applications with functionality to move beyond reporting and actually providing the groundwork for data-driven decision-making'. (Jones, 2014, p. 43)

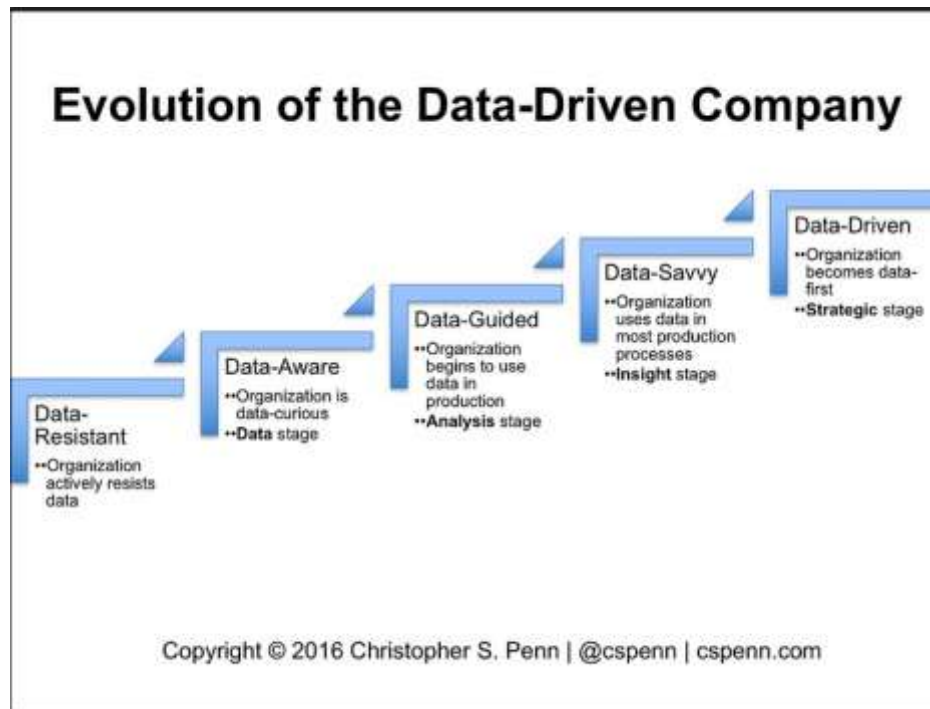
In a competitive market scenario, it is imperative that an employee's potentials be harnessed to the best for organisational success. In such an environment, human resources remain one of the primary distinguishing factors for an organisation that can be used for competitive growth in order to create necessary organisational value (Bharti, 2017). The optimum utilisation of the human resources capital that an organisation possesses is an on-going process; consistent efforts in the direction will ensure that the human resources of an organisation would remain an asset and not a liability.

Managerial tasks and decision-making on critical issues form an integral part of the work, which falls under the scope of the HRM of an organisation. Decision-making has been identified as one of the most critical organisational processes including employee behaviour, work performance, levels of motivation and the amount of stress levied on employees (Griffin and Moorland, 2011).



<https://www.ngdata.com/6-ways-predictive-data-analytics-are-reshaping-marketing/> Accessed on 10th Jan, 2018

Human resource analytics is a relatively novel intervention in the larger domain of HRM, and it refers to the use of statistical tools, measures and procedures, which can be used in employing and making the most effectual decisions such as HRM strategies and practices. It is often referred as people analytics or talent analytics or workforce analytics (“People Analytics”, n.d.). HR analytics can be understood as being more credible because it provides statistically valid data and evidence that can be used in the process of creating new strategies during the implementation of existing HR strategies and other measures. The possibilities for HRM offered by analytics have been realized by employers and organisations, but there remains an immense room for growth in the area and the study of the relevance of analytics within the various categories that fall under HRM.



<https://www.ibm.com/blogs/business-analytics/evolution-data-driven-company/> Accessed on Feb 24, 2017

The present study is directed towards exploring the existing literature about the relationship between Human Resource analytics and the role it can play in improving the existing range of managerial and HR-related tasks. The exploration of this literature will be instrumental in providing insight into to what extent people analytics is relevant in the domain of decisionmaking and the ways in which it can be adopted by organisations to expect good returns on investments made in the process. This will include critical examination of the steps in detail taken for the integration of HR analytics in the organisational structure; the processes employed, and the statistical tools used for data storing and the approach adopted while putting analytics to use for industrious decision-making. Hence, HR analytics can be understood as offering significant prospects and has a huge potential of improving the HR and Managerial decisions making process that will be explored during the present study.

2. Research Aim and Objectives:

The aim of the following research is to undertake an exploration of existing literature with the aim of understanding the relationship between human resource and analytics and understand the role it plays in the improvement of the existing range of managerial and HR related research. The present study is based on the following objectives-

1. To investigate and gain insight into the future of HR analytics if integrated into the company to assist managers in predictive decision-making based on statistical evidences and relevant HR analytical data and literature.
2. To examine the existing literature on the integration of HR analytics within organisations and evaluate the existing studies qualitatively and discuss the research gaps.

3. Literature Review

People are organizations unsurpassed assets, and effective way of gaining competitive advantage in a present volatile market environment and it is a big challenge for organizations to manage employees with diversified competencies and mapping their outputs in line with the

organizational strategy. This requires creating, analysing and storing vast amount of data to support decision making. Management of human resources requires tools to enable managers to get insights into the patterns that emerge from various HR functions, which will help the organizations in filtering the star performers from the pool of huge employee database. The solution is offered by the implementation of analytics for the management of employee data scientifically and rationally and relating with the organizational outcomes. "HR Analytics" includes the use of statistical techniques, research design, and algorithms to evaluate employee

data and translating results into evocative reports (Levenson 2005).

Human Resource Analytics (HRA) is a relatively new term; first appearing in the HR published literature in 2003–2004 according to our research of major databases. In an article titled 'HR Metrics and Analytics: Use and Impact' appearing in Human Resource Planning, published by the Human Resource Planning Society, Lawler, Levenson and Boudreau (2004) distinguish 'HR Analytics' as separate from 'HR metrics'. HR metrics are measures of key HRM outcomes, classified as efficiency, effectiveness or impact. In contrast, Lawler et al. (2004) state HR Analytics are not measures but rather represent statistical techniques and experimental approaches that can be used to show the impact of HR activities. Despite this distinction between HR metrics and HR Analytics, there still is definitional ambiguity in the literature.

Bassi (2011) argues that HR Analytics can be considered both as 'systematically reporting on an array of HR metrics' or more sophisticated solutions, based on 'predictive models' and 'what-if scenarios'. In addition, Bassi's definition includes the notion of taking an 'evidence-based approach' to making decisions on the 'people side of the business'. She concludes HR Analytics 'is an evidence-based approach for making better decisions on the people side of the business; it consists of an array of tools and technologies, ranging from simple reporting of HR metrics all the way up to predictive modeling. (Bassi, 2011, p. 16)'

Adding controversy, Rasmussen and Ulrich (2015), and also to some extent Angrave et al. (2016), suggest HR Analytics is a fad. Fads are 'largely insignificant, non-rational swings that come and go with little or no lasting impact on the language of management techniques or organizations themselves' (Abrahamson & Eisenman, 2008). They arise from a chance conjunction of forces that trigger diffusion largely based on bandwagon effects and eventually disappear when the inflated expectations for the innovation are not realized (Abrahamson, 1991; Abrahamson & Eisenman, 2008).

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Rasmussen and Ulrich's (2015) study examines the nature of the claim that HR analytics is said to bring additional value to managerial and HR decision-making by providing statistical backed and verified data. The study recommends that in order to prevent HR analytics from becoming yet another 'management fad', it should work towards altering the conventional

approach adopted by HR and related endeavours in order to ensure that it is effective in terms of providing concrete and material outcomes. The study recommended that instead of employing the traditional HR-oriented "inside-out" approach, there is a need for shift towards the "outside-in" approach, which is implemented with an emphasis on concrete action. This suggestion for an altered approach could be implemented through the use of relevant technological interventions. Ulrich and Rasmussen's study presents two case studies on the implementation of HR analytics in business analytics and studies the positive implications it has in terms of optimising performance and managing the development of organisational talent.

The study posits HR analytics as a judicious tool in order to enhance the real-world impact of HR in achieving business goals.

Levenson, in his 2011 study, advances the importance of analytics to HR practice in which it provides a comparative analysis of the cost benefit and impact analysis and the ROI. Building on his 2005 study, Levenson (2011) postulates that the use of analytics and metrics provide great potential for the improvement of the quality of decision making in human capital and HR issues in the firms. The study advances that the analytics in the HR function have been observed as a specialist skill preserved from the analytic specialist.

4. Concrete Decision Making

Harris, et al.(2011) note that efficiency outcomes (e.g. cost savings on HR processes) are **unlikely** to result in business impact because administrative costs typically only represent 3% of a company's selling, general and administrative expenses, so no amount of savings wrung from reducing HR administrative expenses is likely to have any impact on business performance.

Providing triangulated evidence for a relationship between business impact and use of HR Analytics established empirically by Aral et al. (2012), 6 non-empirical articles provide illustrative case studies which the authors argue document a positive relationship. For example,

Coco et al. (2011) provide a detailed case study of how the home improvement retail chain, Lowes, used HR Analytics to establish a link between HR processes, employee engagement, and store performance.

Harris et al. (2011) provide high-level case study examples to illustrate the 6 analytical tools they argue comprise HR Analytics and link these to business impact. For example, they describe how Google uses HR Analytics to predict employee performance using their applicant database. Sysco uses HR Analytics to establish causal links between work climate surveys, delivery driver employee satisfaction, customer loyalty and higher revenue.

Finally, a couple of studies document the low level of HR Analytics diffusion across companies, which is surprising given the early, albeit sparse, evidence supporting a causal link between HR Analytics and business outcomes. Falleta (2014) conducted a survey to determine use of HR Analytics across Fortune 1000 firms.

With a sample of 220 firms, Falleta (2014) reported that only 15% of respondents claimed HR Analytics played a central role in determining or implementing HR strategy. Furthermore, HR Analytics primarily consisted only of analysing employee survey data. Lawler et al. (2004) and Lawler and Boudreau (2015) report the results of a survey of over 100 Fortune 500 companies suggesting less than a third of these companies have HR Analytics that measures the relationship between HRM processes and people and business impact. This ratio is low particularly considering that the survey shows that over 70% use HR metrics to establish how efficient their HR processes are.

5. Concerns and Issues

HR analytics is an evidence-based approach for improving individual and organizational performance by making better decisions on the people side of the business. Although it is not its purpose to prove the worth of HR, analytics can certainly enhance the credibility of the function and the profession by improving the effectiveness of HR policies and practices and contributing to the competitive advantage of organizations that develop it as a core competency. An added side-benefit is that HR analytics can help expose where effort, resource and budgets are not producing their intended impacts, and in so doing reduce the workload while improving the effectiveness of HR.

As such, HR functions and professionals develop new skills and capabilities so that they can effectively partner with and lead IT and finance on HR analytics initiatives or risk ceding this increasingly important and strategic responsibility to them. Mastering this effort would represent a win-win for employers and employees, and ultimately the society in which we live and work.

So, to summarize, the benefits of HR Analytics are:

1. They can redirect the money they spend today on the wrong employee initiatives to more beneficial employee initiatives.
2. The investments that they decide to make that focus on employees will result in tangible outcomes that benefit shareholders, customers and employees themselves.
3. The returns on such investments, via their impact on the top and/or bottom lines, can be quantified.
4. HR departments can be held accountable for impacting the bottom-line the same way business or product leaders are held accountable.
5. HR executives will be included in the conversation, because they can now quantify their numerous impacts on business outcomes.

Human resources departments have been slow to get on board with big data, and it's not just a lack of forward thinking. They face big challenges when implementing hr data analytics, both of logistics and mind set.

Issues:

1. Bringing together data from many different places
2. Lack of data analytics skills within Human Resources
3. Insufficient it resources for hr data analytics

4. Worries about privacy and compliance
5. Taking the “human” out of human resources

Big data and predictive analytics support hiring, and they help us understand what makes candidates truly successful. But human beings still make the final decision. Thanks to data, they make better decisions.

6. Discussions and Conclusions

The present research aimed for an exploration of existing literature with the aim of understanding the relationship between human resource and analytics and understand the role it plays in the improvement of the existing range of managerial and HR related research. The study's focus was on investigating on the future of HR analytics if integrated into the company

to assist managers in predictive decision-making based on statistical evidences and relevant HR analytical data and literature. Also, the focus was on examining the IT infrastructure and technological interventions, including those that affect the way data is mined stored and made in terms of the effective implementation of HR analytics and the need for them in order to be efficient in terms of data storing in order to be relevant for HR analytics. A significant conclusion drawn from the review of literature on the integration of HR analytics in the domain of human resource management makes it clear that while suggestions for theoretical models that could be adopted for the hassle-free integration exist, there is a lack

of literature that reviews the real-world applicability of these models and has reviewed the success (or failure) of these models or strategies when implemented in the context of organisations.

7. Limitations of the study

The main limitations of the following research predominantly centre on the availability of literature on the issue. There is an existing gap in which the existing literature on Data Analytics is missing. Due to this, the present study was limited in the range of literature available for review.

8. Future Scope of Study

Future research should consider focusing on case studies of data analytics and organisational studies in an effort to identify the models and roadmaps from different organizations which have been tested, tried and successful. The research should also focus on a more quantitative approach to the research with the aim of observing predictive modelling as an aspect of HR analytics on an organizational setting.

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