HR analytics transforming human resource management

Weena Yancey M Momin, Taruna

Abstract
Human Resources have always been the important asset of the company. To have a competitive edge, employees should be treated as resources and thus by aligning human resource function to the core business goals, organizations can achieve success in the competitive market. Human resources are always at the very core of the organization’s success. HR analytics plays a very important role in aligning the HR strategy with the overall business strategy. HR analytics aids the HR managers to formulate the strategies which enable the organization to gain an upper hand over its competitors. The papers analyzes whether HR analytics is transforming the Human Resource Department and the HR managers. The study examines how HR Analytics facilitates the improvement of workforce performance in an organization thus increasing the productivity of the employees in turn increasing revenue generation. The paper also includes case study methodology which depicts HR analytics as the cutting edge tool for human resource management and not a mere hype.

Keywords: HR Analytics, Workforce Analytics, Human resource Management, Talent Management, Talent Acquisition.

1. Introduction
Human Resource Management plays a critical part in any organization. Human resource management is a function in the organization specifically envisioned to capitalize on the employee’s performance in service of an organization’s strategic goals. The prevailing economic set-up is forcing Human resource Managers to emphasis their attention on its workforce performance for generating returns for the business. But as global economic and political settings are changing, it has started to worry the corporate leaders, and hence their attention has turned to the various devices that can nurture success in uncertain times. In today’s fast emergent economy, competition has intensified among organizations. To achieve strong competitive edge, organizations must align their HR strategy with their overall business strategy. No functional area of any organization can function without the help of human resources. Hence human resources integrally affect the overall strategy of the organization. Humans are the greatest resource an organization can have. Thus, human resource management is that part of the organization which is concerned with the “people” aspect (DeCenzo and Robbins, 1996) [3]. Every organization is basically comprised of its people. And ensuring their productivity remains profitable to the organization is the job of the HRM.

As the economic scenario keeps on changing due to globalization, Human resource department also needs to adapt to this new change. Hence, retaining top talents is the primary concern for the HR today. Better employee engagement and retaining strategies are the need of the hour. For instance, HR today is mainly focused on the execution of strategy in the form of downsizing and restructuring strategies through outplacing employee performance related pay policies, reducing wellbeing care overheads and retraining employees. Hence, even in the increasingly competitive environment today, establishing HR practices that build employee commitment can help expand organizations responsiveness. The success of the organization depends on its people. Human resources help to cope and survive in the midst of fast growing and fast changing socio-economic environment by exploiting business opportunity with the minimum risk and challenges. Hence humans are crucially important and provide a strategic advantage in the fierce competitive market.
Challenges Faced by Human resource Department

Due to rapid economic changes and globalization, Human Resources department has been regularly facing challenges and are in constant dilemma towards decision making. The challenges being faced by HR today are high turnover rate, low performance, absenteeism, recruitment of the right candidates, workforce forecasting and many more. Every passing day each challenge is becoming more intense. The high turnover rate is one of the utmost volatile aspects in any organization. If turnover rate can be projected accurately then it will aid in better future workforce planning. This will aid the HR managers to develop better compensation and benefits packages hence reducing employee turnover. Since each variables of HR is interrelated, knowing the cause and effect of one problem can help device solutions for all the others.

Understanding human behavior has always been the toughest challenge in an organization. Employee attributes, attitudes, job satisfaction and many such other factors are although indispensable in carrying out one’s duty but cannot be quantified. Overlooking these factors can spell doom for the organization. But it is a huge challenge for the HR Department to manage these factors as these are vital factors and one knows that if it cannot be quantified then it cannot be controlled. Hence quantifying, measuring and controlling these aspects holds the key to a better workforce performance. With the emergence of new IT based technologies like HR analytics, quantifying the HR aspect is now possible. HR Analytics has helped organizations to mine the previously unquantifiable HR data to derive a gold mine of HR intelligence which can be used to optimize the key performance indicators hence driving performance.

HR Analytics

Globalization and changing business dynamics today has increased the tasks to HR and the management on how to best improve and use an agile and highly-competency workforce mean while upholding the cost efficiency. Current business challenges claim more than just greater efficiency in the HR department and an HRM structure. Rather, they necessitate increased efficiency gained through a comprehensive understanding of the factors driving workforce performance. Organizations must understand the complex interaction between staffing levels, competencies, compensation benefit structures, personnel profile, and additional factors to help them maximize their return on human capital.

HR analytics or workforce analytics aids the organizations to make workforce decisions by reducing the costs, identifying the revenue streams, mitigate risks, and execute effective business strategies. HR analytics empowers the HR managers with accurate predictive analytics which determines the future, mainly for the organizations seeking more proactive role in driving business strategy. HR Analytics enables the HR Managers to make human capital decisions that impacts the business results. Hence, it enables the HR to be more engaged in the formulation of the corporate strategy.

The various challenges of HRM can now be addressed with the help of HR Analytics. HR Analytics gives the HR the tool that provides the insights which are required to make bigger contribution at the strategy table. As the challenges grow in this changing economy HR Analytics transforms the HR department with full automation. HR Analytics transform the raw HR data into the insightful information to the strategy formulation then finally to form a great innovation. HR analytics aids to move the organization forward and stay ahead of the competition by capitalizing on the insights acquired.

HR analytics builds competitive gain by producing actionable business intelligence on the “people side” of the business.HR analytics is assisting the organizations to renovate the Human resources from being tactical support function into a strategic partner (Smith, T, 2013) [1].

HR Analytics Transforming Human Resource Management

Organizations worldwide today have been using HR analytics software to increase the workforce performance. The deluge of HR data is the sources of information that helps the executives an unprecedented ability to understand their employees and businesses, expect challenges, and identify opportunities. In the article How HR Analytics can transform the workplace (Nerney, C. 2014) [2], explains how the ability to capture data and analyzing them has helped the organizations to both increase the revenues by better understanding and precisely targeting customers and cutting costs through the improved business process. He also says that HR managers are now able to analyze mountains of structured and unstructured data to answer the critical questions regarding workforce productivity, impact of training programs on performance, predictors of attrition and also able to identify the potential leaders of the organization.

In this intense competitive market, every organization has to face tremendous amount of challenges in front of them. These dilemmas can now be overcome with the new cutting edge technology viz. HR Analytics that helps the HR managers to take a fact based decision supported by data based evidence. By using HR Analytics, Senior HR management can now justify the investments made to the human resource projects and also predict future outcomes. Hence HR analytics is the dawn of the new era for Human resource Management for overcoming its crucial issues and challenges.

In order to determine how HR Analytics has transformed the world of Human Resource Management few case studies can be analyzed.

Case – I: A Case Study of Manitowoc (Source: Paleton group, case study)

For more than a century, The Manitowac Company has been on the cutting edge of equipment manufacturing. This multi-billion dollar organization, with operations in over 26 countries across the globe, grew and outpaced its competitors over the past few years despite a tough economy. Similar to most companies, Manitowac is faced with eventual retirement of many employees in strategic job classes, including engineering and manufacturing operations. To anticipate and prepare for the recruitment, and ensure an orderly transition of the intuitional knowledge from the experienced employees to the new hires. Although the company uses PeopleSoft 8.9 as its HR management system, it did not have the reporting capabilities required to paint a complete picture. As a result, the HR team had to manually pull data from the PeopleSoft and a multitude of other source systems to provide full visibility to the executive team’s inquiries. To support the ongoing strategic planning process
and gain easy access to key HR metrics, the team decided it required a more robust HR reporting and analysis platform. The critical success factors for these initiatives included: 

- Implement a valuable Phase I solution by the end of 2012.
- Leverage existing knowledge and experiences through pre-built vendor solutions
- Provide flexibility to accommodate future initiatives and business needs to
- Introduce data stewardship to provide consistency across all systems
- Enhance architecture, policies, practices and procedures to manage the full data lifecycle.

Solution
In May 2012, the company’s HR group initiated the strategic HR analytics initiatives, and decided to implement Oracle’s HR Analytics solution to meet its success criteria. To hit the tight deadlines, the implementation team utilized a phased approach, including basic dashboard and reporting capabilities accessible via desktop and iPad. This allowed the team to answer immediate questions surrounding the workforce profile, demographics and performance management. Phase II and III included integration of Non-Oracle/ PeopleSoft HR data sources and deployment of more advanced dashboard reporting and analysis capabilities. Leveraging Peloton’s Breakaway delivery methodology, the end users were able to provide feedback through active participation in frequent modeling sessions. These Business adoption Model (BAM) sessions exposed stakeholders to the often, providing them with heads-on, experimental learning leaning and education before the solution went live. This helped to ensure that the solution was closely tailored to the executive team’s needs, and that both the business and IT stakeholders had a clear understanding of the solution.

Benefits
Executives now have on-demand access to up-to-date HR information aggregated across Business units. They are able to better manage their workforce by having faster access to accurate data. The HR team is focused on providing value-added insight – not just a collecting data and building reports. By leveraging Oracle’s HR analytics solution and a focused implementation methodology, the team was able to hit their tight implementation timeline. Finally, the company now has a robust analytical infrastructure and architecture to build upon, and ensure it closely manages its talent pool to maintain its leadership position.

Analysis of Case I
From the above case, it can be inferred that Manitowoc was facing talent management problems. Due to the periodic retirement of many employees at strategic positions and levels, the company was going to lose a lot of experience and intuition which was going to be hard to replace. Recruiting of new employees and scouting them was sure not an easy task and especially recruiting on tight timelines to maintain competitive edge and market leadership was the task in hand. A full-proof plan was required to pull this one off. But as they updated themselves with new HR analytics software and business models, and after its flawless implementation at all levels as intended, the end users found themselves updated and the company was able to better position themselves to forecast future requirements of manpower. The HR team was able to manage their workforce better due to fast accessible data and have better talent management in the company. There was a partial overhaul of the old obsolete HR models, processes and practices in order to make way for a cutting edge, state of the art HR modeling and data management systems which had the capability to completely transform the company’s fortunes for the better. Latest HR analytics solutions combined with the existing people management software was the game changer in this case as it combined the already existing and the more familiar management systems with a proper and systematic approach in the form of the latest in the industry’s Oracle’s HR analytics solution. It also proves the very old adage in business and industry that infusion of the conventional and the cutting edge always works miracles for the company specially when applied in a planned, systematic and in a phase wise manner.

Case II- A Case Study Of Techno Inc. (Source: People Fluent Aquire case study)
Overview
Tenneco, a leading global manufacturer of auto parts, was spinning their wheels with manual organizational reporting and management succession planning processes. They used People fluent’s Org Publisher and Succession solutions to instantly find critical employee data and shorten their succession planning cycle.

Challenge
With approximately 24,000 employees serving customers from dozens of strategically placed manufacturing and research facilities around the world, Tenneco is the leading supplier of emission and ride control systems for automotive and commercial vehicles. Talent management for such a large and geographically diverse company is a challenge, and the manual processes and spreadsheets used by Tenneco’s human resources department were beginning to strain their resources. Carolyn Royce, Director of Tenneco’s Corporate/Global HR Programs, championed a new project that would streamline two critical HR processes at Tenneco: management succession planning and organizational reporting through org charts. The org chart process at Tenneco was regionally created and maintained and therefore, provided no global visibility as the company grew and focused more on global HR solutions. This time consuming and wholly manual process required each region’s HR team to create separate org charts based on data pulled from an SAP database, converted to a spreadsheet and then imported into an outdated version of Human Concepts software. Because each region had their own chart, and there was no consistency or global visibility into the Tenneco organizational structure —and therefore no visibility into global reporting relationships and matrix reporting relationships. Tenneco’s HR executives determined these information silos created difficulties for finding and developing the best internal candidates for global.

Solution
After diligent research and multiple proposals from vendors, Tenneco chose People fluent’s Org Publisher and Succession to provide the basis of their new HR processes. Org Publisher was chosen because of its ability to interface with Tenneco’s SAP database for global employees and then automatically create org charts with up-to-date HR data. The org charts from Org Publisher would eliminate the need to
manually create spreadsheets along with surfacing much-needed global reporting relationships that were previously impossible with their old processes. Tenneco HR could then leverage this data into the Succession tool which helped mine their company’s talent pool, accurately assessed management candidates based on key workforce performance metrics and identified leaders at any level in the organization. Royce placed Joann Aronis, Senior HRIS Manager, in charge of planning and implementing the global project with the goal of charting over 5,000 salaried employees (a large portion of Tenneco’s workforce is hourly) with Org Publisher. Additionally, the project would use Succession to identify close to 2,000 potential successors to over 1,000 management-level employees globally. Aronis and Royce, with Olivier Knoderer (Senior HRIS Manager for International), Renata Vandenberk (HR Management Development Coordinator), a team of IT analysts, developers and other IT resources partnered with People fluent to implement Org Publisher and Succession as a single web-based solution. Using a hosted solution, Tenneco and Peoplefluent customized the solution to not only follow Tenneco’s branding guidelines in an easy-to-use interface for users, but also integrate secure data from six different HR sources from databases in multiple regions. Org Publisher became Tenneco’s one stop shop for talent information with consolidated profiles that contain names, job titles and other HR data—all automatically updated from their SAP HR master database and available only within a specified (location based) managerial span of control for security compliance reasons. The integration of these Org Publisher data profiles with Succession enabled Tenneco to use the built-in 9-Box grid tool to easily identify employees on track for management roles. For the first time, Tenneco HR could visualize their high potential successors based on metrics rather than spend all of their time on the process of gathering and updating the metrics.

**Analysis of Case II**

Tenneco was facing a talent management problem as it is spread across many countries and the use of outdated methodologies and processes in HR was adding to their woes. To be specific, organizational reporting and management succession planning flank was hit badly as they were manually trying to maintain databases across locations with no co-ordination with the central HR team whatsoever. Nobody was aware of the HR resources that they had for an impeccable succession planning for strategic position and levels which also includes the top brass. Bottom line, company’s future was in jeopardy along with a shaky current HR department which was straining resources to make ends meet. But, with a determination to immediately address these burning issues, the company’s HR came up with the introduction and implementation of the Peoplefluent’s OrgPublisher and succession which was a tailor-made solution to the database compilation, maintenance and org chart publisher as well as a readymade tool for addressing the succession planning issue. It was intelligently integrated across all locations to pool in the entire data in order to make it readily available when requested. All data in these databases across all locations were synchronized as well. Not only the data was collected and collated from different databases across locations but it was also classified according to the company’s requirements and also made meaningful as what big data management systems are supposed to do. This meaningful and more sensible data assorted with the required metrics now could be used for succession planning for critical roles across the company at various managerial levels which previously seemed as a distant dream. Implementation and integration of the latest HR analytics into the HR systems and databases helped Tenneco overcome the reporting and succession planning issue in style and just in time to streamline such indispensable processes.

**Case Study –III: A Case Study of Colorcon Inc (Source: Aquire Case Study, 2010)**

**Summary**

Colorcon, a global supplier to the pharmaceutical industry, wanted to broaden its view of its widely-disbursed workforce in order to better understand and utilize its most valuable asset - its people. The answer: integrating vital data with Aquire’s organizational charting solution, OrgPublisher™. By integrating the Aquire solution with its global Oracle® employee and HR database and reporting that information to its Intranet, the company gives its executives and employees an accurate, fast look at headcounts, reporting relationships and other vital aspects of the company’s structure.

**About Colorcon**

Colorcon, Inc. is a global company that develops, manufactures and supplies specialty chemicals and excipients for the pharmaceutical industry. Its core business is the design and technical support of advanced coating systems for pharmaceutical dosage forms for immediate, sustained and enteric release. In addition, the company’s technological capabilities include assistance in the development of solid dosage formulations.

**Challenges**

When a Colorcon team began researching available organizational charting, Colorcon needed to make better use of the vital HR information residing in the Oracle module it was using for its global Human Resource programs. While the employee information was available in some formats, there was no simple, scalable way for managers and directors to quickly see how the company was structured from top to bottom or to obtain actionable HR information.

**Solution**

Once Colorcon decided it was time to liberate the HR information residing in its Oracle HR system, it called on Aquire to tap into its organizational charting expertise as well as its integration abilities and flexibility - which includes support of all major platforms including Microsoft, Oracle and PeopleSoft. Handling much of the integration in-house but relying also on Aquire’s experienced programmers and engineers, Colorcon successfully integrated its relevant HR data from Oracle to its employee Intranet. The key: Org Publisher, which enables organizations worldwide to chart, view, model and analyze organizational hierarchies and human capital information. In use by hundreds of Oracle and PeopleSoft customers around the world, OrgPublisher installs easily with step-by-step wizards, and provides access to standard and custom HCM data elements and supports various hierarchies in Oracle and PeopleSoft, including employee-to-employee, position-to-position and business unit to business unit. It also offers optimized support for position management to capture and model the organization.
and the span of control. In addition it offers integrated security to control access to sensitive information.

Analysis of Case III

The main challenge that Colorcon was facing was the lack of simple, presentable and wholesome actionable data for the top management to work upon (An apt problem for HR analytics personnel, where their eyes get lit up). With their motive to understand their employee behavior and in their quest for holistic HR information source which will serve the purpose of empowering the top level managers to better utilize their most valuable asset- the people, the company handed this turn-key project to Acquire to recognize and tap into their Oracle HR system and database and integrate the relevant HR data to its employee intranet. With this, the managers were able to obtain relevant, presentable and actionable data to work upon for better management. Moreover, the company could also protect its classified information from falling into the wrong hands. This and various other benefits behold from the latest HR analytics systems which provides to-the point and selective solutions to greater increase the span of control for any organization.

Conclusion

From the analysis of the above three case studies, it can be concluded that the problems which the three companies were facing has been identified and resolved with the help of HR Analytical software. The problems of HR viz. succession planning, recruitment, manpower planning, forecasting of turnover etc. all can now be solved with the new technology like HR analytics. HR analytics has helped the organizations to improve their performance by creating a network of individuals to function as a strategic partner. The latest thinking and information on the HR implications has proved to be a global forum for the Human Resource Department. In order to stay as a market leader, fresh tactics and new innovations are required. In the age of Analytics, talent represents the last true competitive edge for organizations today. So, why HR area should be lagged behind. HR analytics is helping the Human Resource Managers to become true strategic leaders. Thus HR analytics is transforming the Human Resource Department and the HR managers to function more as business partners and achieve organizational success. HR Analytics has indeed facilitated the improvement of workforce performance in an organization thus increasing the productivity of the employees in turn increasing revenue generation.

References