

## ANALYTICS AND PERFORMANCE MEASUREMENT FOR ORGANIZATION DEVELOPMENT

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Abstract: The success of any business depends on the skill and expertise of the employees. A business which can attract the right competencies, manage talent effectively, utilize capacity efficiently, and retain employees is will in the long-term be successful. Human Resource departments have more data on employees than ever before but they often struggle to turn their data into valuable insights. Talent is important for Organizations, and the acquisition and management of talent is often a critical factor in business growth. Competency acquisition analytics is a process of assessing how well a business acquires the desired competencies. Organizations need to start by identifying the core competencies of their businesses now and what is required in the future; then monitor how effective they are at developing these competencies in-house or spotting and recruiting candidates with those competencies. On a regular basis companies measure performance of employees against their matrices. As competition intensifies every company wants to keep their employees fit and fiddle for obtaining better performance on an ongoing basis. This is done through measurement of their performance against predetermined matrices and measures. The role of Analytics, is very important or the continued success of any business organization.

### KEY WORDS

*Business success by performance measurement, role of analytics in such measurement, Talent management and competency acquisition and matrices.*

### INTRODUCTION

As we have seen Human performance and their capabilities is the key to organizational success. So, organizations continuously measure key performance matrices to make sure that they are moving towards achievement of their objectives. Capacity utilization of an organization affects revenue generation. Capacity Analytics establish how operationally efficient people are in a business, e.g. are people spending too much time on administration and not enough on objective oriented work, or are individuals are

stretched far too thin. It also allows businesses to determine of how much capacity they have to add. The tricky part is establishing a system to track capacity utilization without creating huge administrative burdens and alienating employees with a ‘big-brother’ approach. Big data and sensor system can be very effective here.

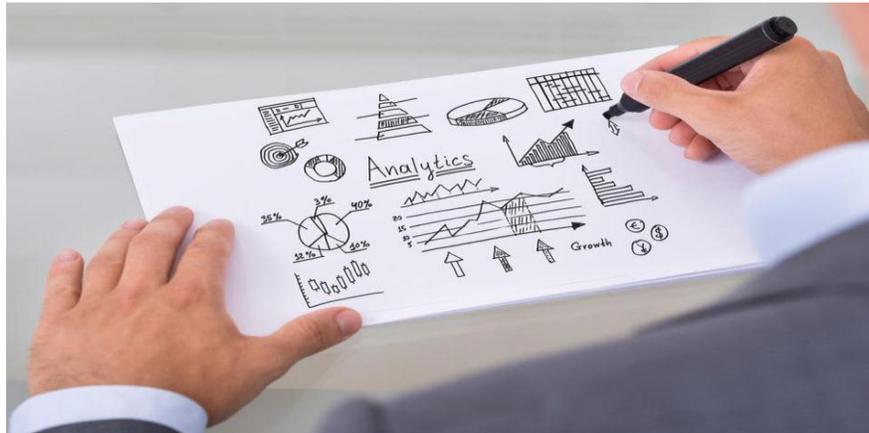


Figure1: The best people and HR analytics (Source: Shutterstock)

Human Resource analytics (HR analytics) aims at analyzing an organization’s employee problems. For example, it helps answer the following questions about the organization:

- How high is the annual employee turnover?
- How much of the employee turnover consists of regretted loss?
- Do we know which employees will be the most likely to leave our company within a year?

These questions can be answered if we use HR data. Most HR professionals can easily answer the first question. However, answering the second question is harder. To answer the second question, you’d need to combine two different data sources. To answer the third one, you’d need to analyze your HR data. HR departments have been collecting vast amounts of HR data for a long time now. Unfortunately, this data often remains unused. As soon as organizations start to analyze their people problems by using this data, they are engaged in HR analytics. HR analytics can be defined as the systematic identification and quantification of the people drivers of business outcomes (Heuvel & Bondarouk 2016). In other words, it is a data-driven approach towards HR. By using HR analytics we do not have to rely on gut feeling anymore. Analytics enables HR professionals to make data-driven decisions. Furthermore, analytics helps to test the effectiveness of HR policies and different interventions. Today, the majority of HR departments focus on reporting employee data. This doesn’t suffice in today’s data-driven economy. Just keeping records is often insufficient to add strategic value. “The goal is to turn data into information and information into insight”. Doing this enables HR to become more

involved in decision-making on a strategic level. The picture below shows how this works in practice.

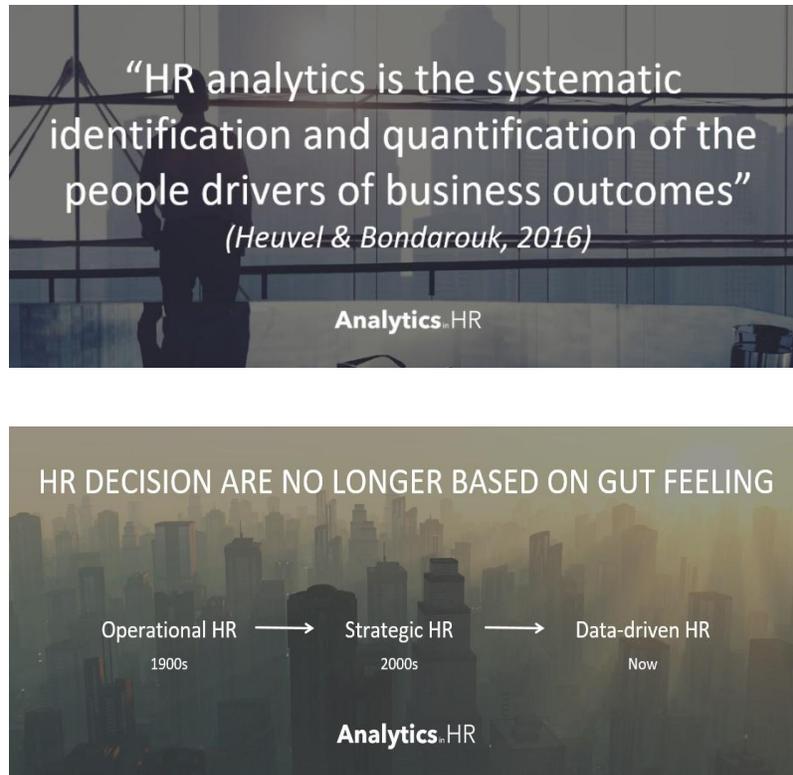


Figure 2: Defining HR analytics

## OBJECTIVES AND METHODOLOGY

We have seen from the introduction that Business Process is driving decision making today and Human Resource Department is no exception to this rule. This explains the development of Analytics for HR department. By definition Analytics in HR would mean measurement of what drives people to better performance and actionable conclusions thereof. As pointed out by the definition, the Objective of this paper is to just identify in the current business environment what drives people to put in their best efforts for the organization to achieve better results. Analytics in business is a vast topic with a variety of purposes and choices. For the immediate purpose of this research paper following specific objectives has been identified:

1. Emerging business environment and the need for business analytics.
2. Why Analytics in HR is becoming more relevant today.

3. Methods and processes of developing such analytics.
4. Current and Futuristic applications and success of organizations.
5. Conclusions and recommendation

The Topic of the application of analytics in management of businesses and organizations, though of recent origin is not new to us. Analytics will be defined for the immediate purpose of the current research paper with a note that the definition is limited to the context of the current research. Competitive business environment has driven organizations to find creative solutions to be competitive in their chosen field. Organizations generally start from marketing to explore the possibility of quick fixes to their problems through incentives and other marginal make ups. But ultimately organizations realize that the problem is deep rooted and needs a comprehensive solution. That is how Bigdata and Analytics have emerged in the present context of finding business solutions of a durable nature. Since the data for the limited objectives of this research paper was available in plenty through published sources and web pages a thorough desk search was made and data compiled and tabulated to arrive at the Conclusions.

## REVIEW OF LITERATURE

For starting Human Resource (HR) analytics, you need to combine data from different HR systems. If you want to measure the impact of employee engagement on financial performance, you need to combine the annual employee engagement data with your performance data. This way you can calculate the impact of engagement on the financial performance of different departments.

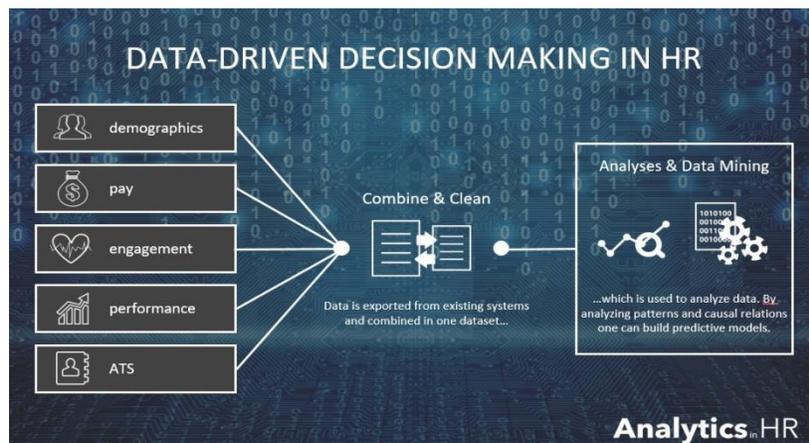


Figure 3: Data driven HR

Key Result Areas will change based on the insights gained from HR Analytics. Functions like recruitment, performance management, and learning & development will be impacted. For example you can calculate the impact of your learning and development budget on business profits! Or you can forecast which newly hired employees will become your highest performers in two years. Or that you can predict which new hires will leave your company in the first year. Having this information will change your hiring & selection procedures and decisions. You can start Analytics by identifying high potential employees using quite simple statistics. Doing this helps to quantify the relationships between people's abilities and organizational outcomes. This way analytics would help companies track absenteeism, turnover, burnout, performance and much more. In addition, by knowing what makes your employees motivated, you can create a better work environment and identify future leaders. Imagine that you can predict which employees are most likely to exit the company. This information helps your succession plan and benefits strategic workforce planning. A notable example of a company doing this is Credit Suisse. Organizations require efficient human resources (HR) data analytics to make strategic business decisions. Insight into uses of analytics in HR, why they are important, and how you can use HR analytics add value to your organization. You will explore resources that will help you align your organization's mission and goals with key metrics and benchmarks. You will also explore how to apply the Analytics Process Model to analyze and organize data and be able to present data effectively to communicate your results and recommendations to decision-makers.

HR analytics was the initial term used to describe the measurement of effectiveness of Human Resource interventions and has its origins in industrial psychology, studies to optimize production and thought leadership. The term HR analytics came into wider use as software providers increasingly offered what they called HR analytics tools. However, other terms also came into use -- especially *people analytics*, *talent analytics* and *workforce analytics* -- and were often still used synonymously, although *HR analytics* remained dominant as the catch-all term until recent years. In terms of meaning, talent analytics has been almost indistinguishable from the other terms, touching on everything from recruitment to workforce planning. Big data is defined as volume, variety, velocity, value, and veracity (5Vs) of data available inside and outside organizations. Volume is a large quantity of data. There is not a predetermined number that defines "big" data. What is considered "big" today could be "medium" tomorrow and maybe "small" in close future. Velocity means that data can be acquired, stored, and analyzed in real time. It allows the quick understanding of business environment in order to become more agile than the competitors. Variety is related to the different types of data (structured and non-structured) and sources. Value means the value added to the business due to the understanding of previously unknown insights from data. Veracity ensures that the data collecting methods and data processing techniques will provide reliable data.

Volume, velocity, and variety depend on the veracity, which will define the value. There are four steps to big data processing: (1) acquisition, which encompasses data captured and acquired from many different sources; (2) access, which includes data indexing, storage, sharing, and archiving, usually based on specific software framework for integration and organization; (3) analytics, which is related to data analysis and manipulation; and (4) application, which means making decisions and taking actions

Workforce analytics would refer both to the macro elements of HR strategy -- for example, the effect of changing demographics or issues surrounding skill gaps -- and micro elements focused on workforce planning issues, such as the staffing needed for a particular region or labor costs and productivity. People analytics has largely become the dominant term, according to many thought leaders, since all aspects of HR strategy, at their core, relate to people. Understanding talent management issues and assessing which wellness and learning programs are working, for example, are all about people. In addition, the term *HR analytics* has more narrow scope because of its original connotation as analytics exclusively for the HR department. Today, analytics is increasingly being used to improve all aspects of employee experience by managers and others across the company. Moreover, the actual administration of the analytics tools typically needs expertise outside the HR department and requires the help of data analysts and IT. People analytics is beginning to help more companies in their recruiting, performance measurement, compensation and retention efforts. People analytics can help organizations to understand which candidates to hire, which employees are doing well, who's receiving adequate compensation and how employee retention can be improved. Ideally, people analytics can improve on instinct and gut feeling.



**Figure 4: Use of analytics for people management**

However, a lot of interest in people analytics points to its expansion into new fields, especially with the use of predictive analytics, and that its use is moving beyond HR into the business as a whole. Two examples are using people analytics to predict and address low-performing salespeople and hospitals that use analytics to understand the employee factors in patient care. Creating new opportunities for revenue by looking at both customer and employee data and enabling profit growth by analyzing spending are two others. Progressively, companies are looking to out sourcing rather than building their own tools as analytics models become more widespread. As just one example, some ERP vendors are including people analytics dashboards meant to help senior executives understand attrition rates, employee costs and employee engagement profiles for specific segments and managers. People analytics are also expected to analyze teamwork and organizational relationships, which may take on increased importance as companies replace hierarchical models with more collaborative ones.



**Figure 5: Analytics Journey – how it is making a difference**

One point of confusion may be the difference between HR metrics and HR analytics. In essence, metrics describe concrete measures of past performance, while analytics uses data to gain insights or predict future patterns. Metrics typically describe basic information, like how many candidates applied, how many employees left the company and other descriptive measures, while analytics looks at answering questions such as what educational background best helps indicate future high performers or why top

performers are leaving. Initially Big Data – a tech heavyweight dominated enterprise conversations for years to come. Then, predictive analytics followed: a worthy successor, taking the raw potential of unprocessed data, to extract insights actionable on the floor. Today, predictive analytics has moved out of tech circles (think data scientists and IT experts) into more mainstream decision tools verticals. Companies are now taking what was the strong hold of a few, and applying it to real processes, everyday operations that can transform business as usual. HR departments have long been entrusted with some of the most vital functions in any organization, starting at talent acquisition, moving to performance/productivity mapping, up skilling, and even outplacement. The power of analytics can make a sizable difference at every step – bringing an element of ‘predictable, quantifiable outcomes’ to something that’s quintessentially dynamic – *human capabilities*. And companies are awake to this potential. In 2015, only 24% employers were ready to build predictive analytics-based people management models. Next year, the number jumped to 32%. That is how 2018 will bring in a whole new set of use cases for analytics in the HR space.

Great employees are a must-have for any successful business – and by ‘great’, what’s needed is not just the most talented or most experienced or even the most qualified candidate. Companies are increasingly looking at a ‘cultural fit’ – a metric hard to quantify, but essential to the organizational fabric. Once the ideal employee is identified and successfully on boarded, it’s up to HR to help maximize their role in the company. Using analytics, managers can keep a razor-sharp focus on performance, progress, slips, and triumphs. This data, when aggregated, offers key insights –the early opportunity to gain exposure and participate in the data analytics megatrend. Mexico Government’s Ministry of Energy is currently harnessing a predictive analytics model for workforce planning – the goal is to locate skills gaps in critical oil and gas occupations (both existing and potentials) and eliminate them for a smoother pipeline. The solution takes several factors into account, like adjustable macroeconomic variables which directly correlate to demand and supply of skilled labor in the industry. The ability to predict gaps and plug them with minimal lags in performance is a great-to-have for any organization’s kitty, and modern software is making this simpler than ever before.

The evolution of analytics for organizational benefits has been well depicted in the (Figure 6), given below. It shows how Business Analytics has influenced the organizational processes from 1900 till today. In the industrial economy, Logistics, supply chain management, financial and budgetary controls, integrated ERP and finally Financial analysis helped achieve control of operations. In the following two decades, CRM and customer analytics were developed and successfully applied. During the same period web based tools were developed for better analysis of customer preferences and

satisfaction and finally predict customer behavior. From Finance and Logistics to marketing and customer satisfaction, today analytics have entered the field of Human Resources and help identify talent and develop Leadership skills for the company



Figure 6; Growth and influence of Analytics

Today, analytics is moving into hitherto unknown and untraveled paths. Truly organizations are not talking about cost to company of an employee but value addition as seen in Figure 7.

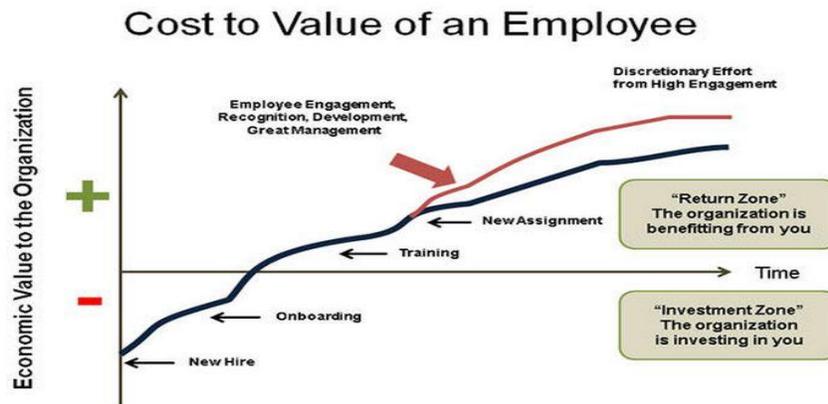


Fig 1: Economic Value of an Employee to the Organization over Time (C) Bersin by Deloitte

Figure 7: How employee can add value to a company through

### **Training and Development**

Predictive analytics takes historical data to unearth possible attrition before it happens. "Predictive Analytics analyzes an organization's data to identify the factors that have the biggest influence on employee flight risk. One of the five trends that stole the show last year was predictive analytics – at an iconic HR event, where the technology promised new vistas of applications and improvement. Beyond a simple solution or product, it is a business weapon of the new age, evolving, adapting, and plugging into a wide range of requirements and a variety of organizational needs.

Thus Analytics compliments Human Resource initiatives with an accurate data base. New technologies help the employee and management to improve organizational performance. Through critical and insightful analysis helps assessing fair performance targets for Employees, teams, groups and industry as a whole. Sensitive Human issues are solved, with insight and a strategic vision. The decision making process is democratized and organizational governance is improved.

### **FINDINGS AND CONCLUSION**

The business environment that is emerging is not only competitive but offers a lot of challenges to Human resources function which has the responsibility of hiring the right people and motivating the people so hired to stay with the organization for achieving the objectives of profitability and market leadership. For this all the business organizations have their own information systems. The emerging environment offers great challenges to Human resources function because they have to retain good people, recruit new ones to replace the people who exit not necessarily because of dissatisfaction but other personal reasons. One of the latest techniques adopted by progressive organization who anticipate future development and take actions in the present is through data analytics specifically designed and developed for HR function.

Various organizations have found that analytics and the matrices help them evaluate employee performance and take actions for Training and developing the promising executives for higher responsibilities and recruit new blood through all channels. Because of the digital development in organizations and the mobile culture and the “always on younger generation of employees, companies have to tune their HR initiatives for keeping pace with the market developments. The digital revolution calls for changes in the recruitment policies, identification of talent and keeping abreast of the technological changes. Business Analytics is a solution for keeping an organization abreast of all developments which will impact their sales, market share and motivation of employees.

That is why Business Analytics as an ongoing function is more relevant so that organizations respond quickly and effectively to the environmental changes affecting their business.

In the current environment organizations need to be continuously monitoring their performance through matrices and analyzing deviations from plan to identify reasons and take immediate corrective action. Performance management is part of the Analytics and feed back is instantly available to all departments, because of the past data of the company and industry data for comparison. Currently several soft ware and hard ware programs are available for companies along with consultants to implement a suitable program to continuously monitor the performance and take actions on real time because of the digitalization of the work culture.

Currently data analysis and Analytics are used for sales forecasting and the futuristic applications will be more towards the Applications for HR function. Talent management, Recruitment and performance management will be through such data analytics. There is an ongoing development and companies can have their own skilled persons to handle the portfolio or hire external consultants who are available in plenty and at reasonable costs. The main requirement is to develop an organization culture of sharing and openness to new ways of working to be competitive in the market. Customer retention and profit maximization and all other functions related to Operations, Finance and Employee engagement are managed through such Analytics.

## RECOMMENDATION AND SUGGESTIONS

Companies have to fore see the future and install systems for Performance management, Operational efficiency, productivity and profitability through matrices of Analytics. The new way of working with flexible timings and mobile communications actually help Employees and Management to be always alert to the market developments. Hiring practices also undergo a lot of changes in terms of processing and Training. All the processes in a company are open and visible and can be analyzed at all points of time. This is a new opportunity and not a threat as perceived in some quarters. The suggestion will be for prospective employees to be aware of the current methods of recruitment, selection and Training. Survival of the fittest will be the order of the day.

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