



ISSN Print: 2394-7500  
ISSN Online: 2394-5869  
Impact Factor: 5.2  
IJAR 2016; 2(5): 785-790  
www.allresearchjournal.com  
Received: 25-03-2016  
Accepted: 26-04-2016

**Weena Yancey M Momin**  
Research Scholar, School for  
Management Studies Babasaheb  
Bhimrao Ambedkar University,  
(A Central University) Lucknow,  
Uttar Pradesh, India.

**Dr. K Mishra**  
Head & Associate Professor  
School for Management Studies  
Babasaheb Bhimrao Ambedkar  
University, (A Central  
University) Lucknow, Uttar  
Pradesh, India.

## HR analytics: Re-inventing human resource management

Weena Yancey M Momin, Dr. K Mishra

### Abstract

Human Resources have always been the vital 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 the cutting edge tool for 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 and thus re-inventing human resource management and not a mere hype.

**Keywords:** HR Analytics, Workforce Analytics, Workforce Performance, Organization performance.

### Introduction

*(Humans as a Resource for strategic advantage)*

In today's fast growing economy, competition has intensified among organizations. To achieve sustainable competitive edge, organizations must align their HR strategy with their overall business goals. 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 or employees become a resource for an organization when they function at their best. They perform their duties and responsibilities better which aids in greater organizational performance. It is the function of the HR to retain and acquire these best in class employees so as to hold the advantage in today's market. Retaining top talents helps in better planning, better strategizing and better execution of the strategies. Employees that put their best efforts and function as a team helps the organization achieve greater heights. 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 linked pay plans, reducing health care costs 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 is 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.

### Issues and Challenges of Human Resource Management

The attributes of human resources are very difficult to measure and quantify. Understanding the human behavior is the toughest challenge the organization has to face every day. As the human aspect is hard to measure, so it is difficult to quantify them. HR managers face various challenges in accurately measuring the performance of the employees. Issues and challenges faced by HR managers today are:

### Correspondence

**Weena Yancey M Momin**  
Research Scholar, School for  
Management Studies Babasaheb  
Bhimrao Ambedkar University,  
(A Central University) Lucknow,  
Uttar Pradesh, India.

- Accurately measuring the performance of the employee
- Determining the perfect compensation package
- Measuring and predicting the Attrition rate
- Executing succession planning
- Recruitment of best employees and retaining them
- Handling absenteeism
- Workforce planning to meet the organizational requirements of the present and the future

### Emergence of Hr Analytics (Literature Review)

The issues and challenges mentioned above can now be resolved (upto a great extent) with the emergence of new IT technologies like HR Analytics software which is touted to be the panacea of the various dilemmas of Human Resource Managers. 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. Thereby, working on the strengths and getting rid of the weaknesses. Hence HR analytics is a business opportunity, especially for the HR, to make sense at the board table, which previously used to be taken not so seriously by other departments and the CEO.

In the article *How HR Analytics can transform the workplace* (Nerney, C. 2014) [4], 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.

Also in *Workforce Analytics: Three minute- guide* (Fiore, J., & Houston, J., 2014) [5] explains that workforce is the lifeline of the organization and when it reaches the highest level, the likelihood of the organization reaching its overall goal is also raised up. In the past, HR managers faced great difficulty in making their case for their role in guiding the business strategy. But with the implementation of HR Analytics, they are able to clearly demonstrate their value by making fact based decision supported by data- based insights of Analytics.

The article *Human Resource Analytics (Talent Analytics)* (Rouse, M. 2012) [6], clearly states that the HR analytics is the sophisticated application of data mining and business analytics techniques to human resource data. HR analytics gives an insight for effectively manage its employees for achieving business goals quickly and efficiently. She also explains that HR analytics helps to identify what data should be captured and how to use the data to model and predict the capabilities so that the firms can get maximum Return of Investments (ROI) on tis human capitals.

From the above literature, it can be concluded that HR Analytics 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 the above literature claims that HR Analytics is the dawn of the new era for Human resource Management for overcoming its crucial issues and challenges.

In order to determine whether HR Analytics is the dawn of the new era for Human Resource Management of the organizations, the following objectives and questions needs to be answered:

- To analyze how HR Analytics helps to quantify and measure critical human resource data
- To determine HR Analytics has re-invented human resource management and not a mere hype

For determining the objectives above, few research questions has also been developed. They are:

- How HR Analytics aids the HR Managers to quantify and measure the value of human resources?
- How HR Analytics helps the human resource to become a pivotal strategic partner?

### HR Analytics Ready Recknors

HR Analytics is the new IT based software which aids the HR managers to mine the raw HR data and thus turning them into insightful information which helps in forming strategies and solutions to address the acute issues in HRM.. There are various companies which has developed various kinds of HR Analytic software according to the requirements of their organization. Examples of a few popular HR analytics software:

- Oracle Human resource analytics
- OrgVue solutions
- Aquire Solutions OrgPublisher

### Oracle Human Resource Analytics

Oracle Human Resources Analytics software provides organizations complete analysis on HR parameters and workforce performance. It incorporates critical data from across the enterprise value chain transforming storage tower of information into relevant, timely, and actionable data. Oracle Human Resources Analytics intelligence dashboards provide the following solutions for HR professionals:

- Strategic workforce performance information.
- Determine key factors that drive employee productivity.
- Leverage that insight to increase overall organizational performance.
- Ensure proper deployment of workforce by matching geographic, job, and diversity profile with business requirements.
- Measure the impact of these factors on business performance.
- Increase retention levels and reduce turnover and hiring costs
- Ensure fair, equitable and competitive compensation levels



(Source: Oracle Business Intelligence 11g, 2011.)

Fig 1: Snapshots of Oracle Human Resource Analytics software

**Orgvue Solutions**

OrgVue is the integrated software platform designed to give HR professionals revolutionizing ways to see things, plan and manage the organization. It provides solutions for organizational design, HR analytics and workforce planning. OrgVue for organizational design aids the HR from the “as is” situation to a whole range “to be” scenarios including the

costs, responsibilities and skills. It also provides a powerful and insightful set of tools to the develop vision for the future. It also helps in querying analyzing, updating and modeling the people data. It also helps in workforce planning as well by setting targets for headcount, skill and costs and delivers them.

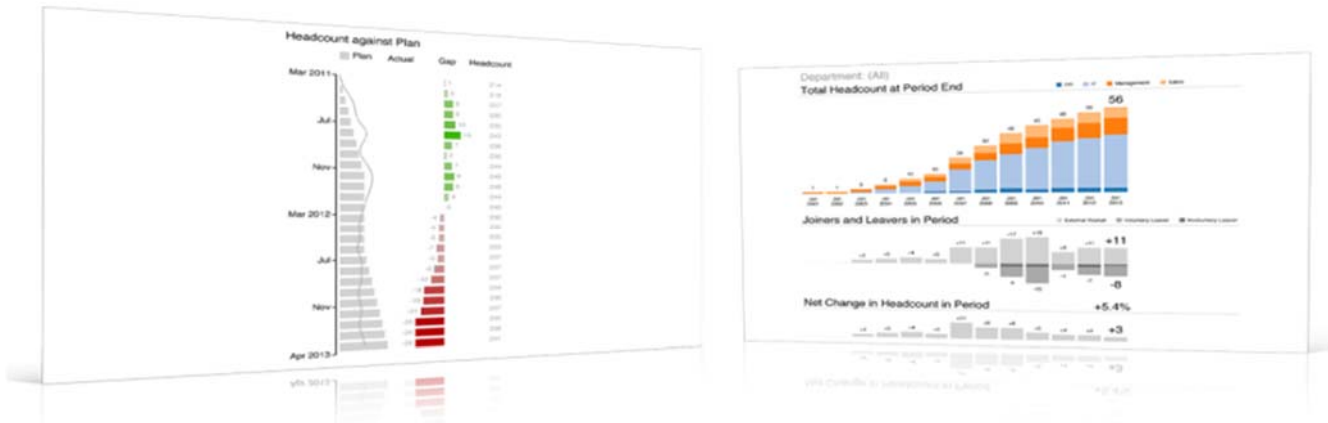


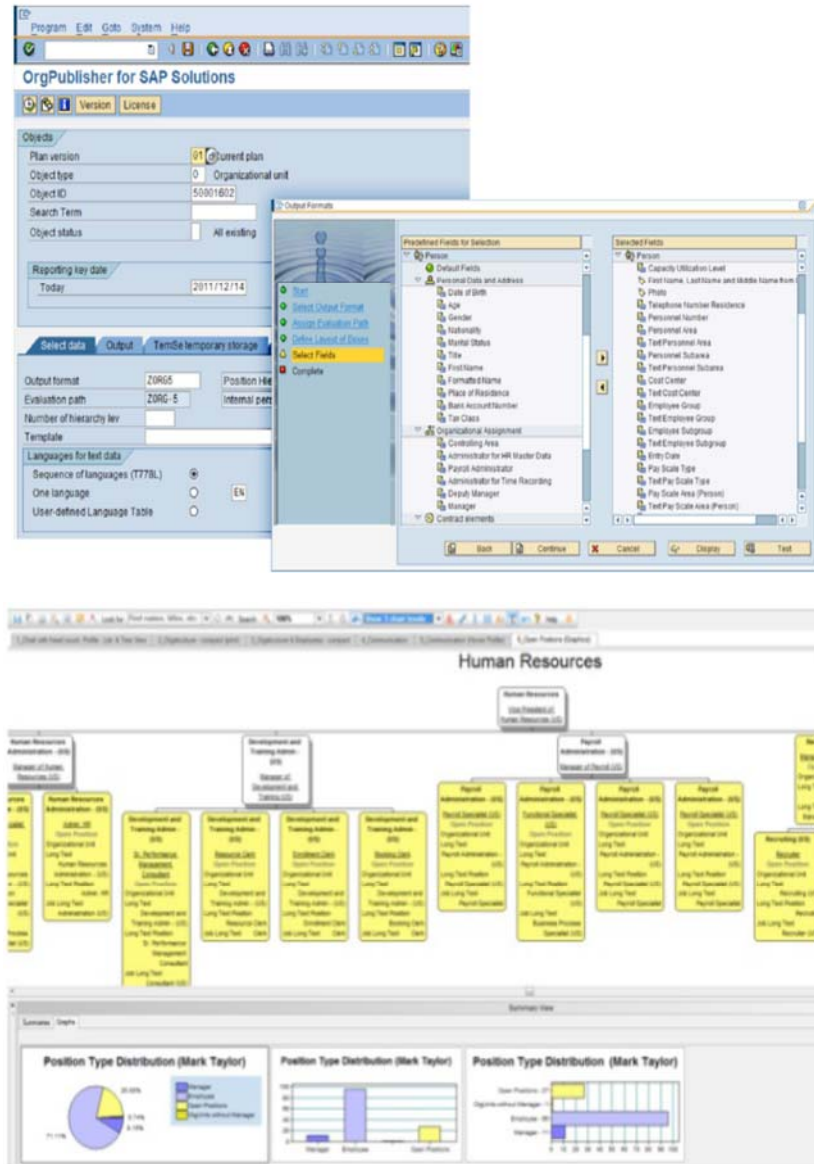
Fig 2: Orgvue Solutions

**Aquire Solution Org publisher**

Aquire is the software company which developed HR analytics software like People fluent OrgPublisher SAP. This software easily integrates with the SAP enterprise portals. Org Publisher automatically create and share org charts in a SAP friendly – environment enabling managers to make better, more informed HR decisions with dynamic Org charts with searchable employee workforce data which is related to headcount, compensations, attrition, and succession planning. It increases the visibility of HCM matrix, thus by analyzing headcounts, workforce

compensations and other vital information. OrgPublisher simplifies the creation of the chart with automated wizards and hence improves the data integrity with visual representation of workforce relationships from multiple data sources.

Thus in can be established that OrgPublisher is a visualization solution that leverages SAP HCM information for efficient, simple talent management.



(Source: People Fluent OrgPublisher Premier for SAP brochure)

Fig 3: Snapshot of OrgPublisher software

**Case Studies Analysis**

For determining whether HR Analytics is really a cutting edge tool and not a mere hype, few case studies has been taken for analysis.

**Case 1: With Designs on A More Efficient Organizational Charting Solution, Autodesk Switches To Aquire and Enjoys Better Workforce Decisions Summary**

Flexibility. Efficiency. Simple integration. Improved workflow and improved visibility throughout the organization. Those were some of the goals Autodesk had in mind when it started looking for a new organizational charting solution. It needed an answer, and it needed one fast.

**About Autodesk**

A Fortune 1000 company, Autodesk is wholly-focused on ensuring that great ideas are turned into reality. With seven million users, it is the world's leading software and Services Company for the manufacturing, infrastructure, building, media, entertainment and wireless data services fields. Autodesk's solutions help customers create manage and share their data and digital assets more effectively. As a

result, customers turn ideas into competitive advantage, become more productive, streamline project efficiency and maximize profits.

**The Challenge: Better Information for Better Decisions**

One of the major challenges Autodesk faced was flexibility. “It was not flexible and as a result most organizations kept their own org charts,” said Janet Franklin, HRIS — Senior Human Resources Manager at the company. The result: duplication of effort, wasted time, resources squandered and a view of the organization that was often too old, inaccurate, or both.

**The Solution: Org Publisher by Aquire**

Autodesk chose Org Publisher by Aquire. The reason? After looking at Org Publisher, Autodesk realized it could save substantial time and put valuable tools in managers’ hands — which created a clear and compelling business case for the Aquire solution. Org Publisher dramatically increases information visibility and access, using employee data from Human Resource systems, payroll systems and other enterprise data sources. Organizational charts, visual reports and corporate directories can be automatically created and

viewed using a standard Web browser. With Org Publisher, the analysis and communication of all data, including information in SAP, becomes much easier to integrate into daily human resource functions, as well as in strategic planning. Autodesk did consider other vendors, but chose Aquire because Org Publisher is Web-based; because of the “professionalism of the sales and implementation teams,” in Franklin’s words, and because of the high degree of knowledge of the Aquire team. In other words, Aquire brought a solution, not a product, to the table.

“Feedback from users has been extremely positive,” said Franklin. “They say it’s easy to use and great to download into Microsoft PowerPoint — and they really like the ability to view vacant positions.”

In essence, as a result of its decision to switch to Aquire, Autodesk is utilizing a better view of its workforce and organizational structure that results in better workforce decisions. Now data is corrected more quickly, workflow is improved and reporting of key HR data is easier.

### Analysis

From the above case study of Autodesk, it can be analyzed that the company was facing problems with flexibility, efficiency and simple integration. But after the implementation of OrgPublisher by Aquire there was an increase information visibility, clarity and easy access to the data sources. Its organizational chart has become simpler, corporate reports and corporate directories can be easily created thus making it easier to integrate into daily human resource functions. Thus implementation of HR Analytics software Org Publisher by Aquire has made Autodesk view better of its workforce and making better workforce decision as well.

### Case II: A case study of European based Construction Company

Regardless of Industry, geography or maturity, an organization must ensure that the HR efforts are aligned with its business strategy. With a presence in Holland and Germany, this is a family – owned construction and engineering company that employs 900 workers. As with any business, the economic conditions of the past three years have triggered a concerted effort to focus on revenue and productivity.

In 2008, a company created a custom dashboard that integrated its workforce management data with its financial application in order to provide better visibility into how HR strategy is impacting business performance. “One of the key areas for us was absence due to illness”, said a director of the company. “Not only does that impact the productivity and revenue, but it is also a measure of employee engagement at the organization.”

When the workforce data was analyzed with respect to revenue, it became clear that absenteeism was an area of concern. At the rate of 6.3% (calculated by hours missed due to illness divided by total hours worked) this measure was slightly above the industry average. Based on this visibility, company leadership worked with the managers on a strategy aimed to reduce absence. The company implemented incentives to reward decreased absence that included rewards for managers that minimize absence to meet specific targets, which varied for each division. It also required employees to provide better documentation for leave and absence.

After implementing the strategies to address these unique issues, the company experienced an increase of 9.8% in productivity. Absence due to illness was reduced to 2.3% - a 64% improvement. As a result, revenue per employee increased by 6%.

### Analysis

In the above case study of the European based Construction Company, the problem they are facing was absenteeism due to which their production level was going down drastically. After a thorough analysis it can be seen that due to absenteeism the company was at loss. But After the implementation of HR Analytics custom dashboard, they could identify the cause of decreasing productivity and the managers and leaders after identifying the problem developed a strategy to increase their productivity and reduce absenteeism due to illness. After implementing the new strategy of incentive rewards, the productivity of the company increase by 9.8% and thus the revenue increase by 6%.

### Case III: Shinogi Inc.

Shinogi Inc. is the US arm of Shinogi & Co. Ltd., a leading Japanese pharmaceutical company. In 2003, Shinogi received a FDA approval for Crestor, a drug to fight high cholesterol. Cholesterol is not a major public health concern in Japan, but in US it is a multi -billion dollar market. At the time Shinogi didn’t have the sales and marketing footprint required to launch such product so they turned to highly successful co- marketing agreement with Astra Zenecea for Crestor. Following Crestor in Shinogi’s drug pipeline were other key drugs however, and the organization wanted to see if it could build the sales and marketing talent pipeline to support future products on its own.

Along the way Shinogi had acquired some other small pharmaceutical companies and in 2010 relocated their corporate headquarters from Atlanta to the pharmaceutical corridor of New Jersey and implemented a new corporate structure. But while they moved the company, they didn’t relocate all their talent. So the challenge was to staff up a new organizational structure, add new capability and build a talent pipeline capable of ramping up and down with their product launches and dips.

When Stephen Matthaey, Manager of Compensation and HRIS at Shinogi, Inc. arrived and tried to help put the pieces together, it became clear that the organization charts used by various parts of the company didn’t sync up, didn’t let them take a clear view of the resources available, and who else they needed. “We had no way to see who we had,” said Matthaey. “And no way to guess if we would have the right talent in place to support a drug launch in the near future.” The organization looked to implement data visualization tools, based on organizational chart view of the company, that brought to life how people in jobs flow into strategic vision.

“What data visualization helped us so is tune the organization, ensuring we have the right structures to support the business as well as the right people in the right roles,” said Matthaey. These tools also helped them move from a backward – looking reporting view of talent, to a real –time window into results being driven by individuals, and eventually a forward – looking scenario model they could adapt on the fly to test future scenario. These tools will enable the organization to bring together employee data,

business data, and talent data and do things like color code for high – potential talent, flight risks, skill gaps and team and individual performance. “It will completely change the quality of the conversation we have. Our senior business leaders can now see at a glance the gaps and work with us to create the right strategy to overcome them”, said Matthaey. “Our business leaders are smart and capable, and with the right data they can make astounding judgments in fractions of the time to get the company where it needs to be.

As a result, when Shinogi rolls out its next drug it has the tools and create the right plan to put talent in the right place to support the drug pipeline, either by redeploying current staff or hiring at appropriate levels. Matthaey concluded, “The quality of our decisions is in direct proportion to the quality of questions we ask. When the answers to the simple questions like who we have and what they do jump off the page, we get to spend time asking and answering the real strategic business questions”.

### Analysis

In Shinogi case study, Shinogi Inc. was facing a problem of unorganized organizational structure and building capable talent pipeline which was not showing the clear view of the resources availability. Then the company implemented the data visualization tool like HR Analytics to have a better view of the organizational chart of the company which enlighten into strategic vision. As a result of implementing this analytical tool, they could create the right people for the right position thus enhancing the quality of the decision and enhancing the productivity of the company in turn increasing the revenue generation.

### Summary of the Finding

From 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. Each company has different problems associated with them but HR Analytics software has enabled all these three companies to overcome its problems and issues thus enhancing the productivity of the employees which in turn has led to increase in the revenue generation for the company. With the help of HR Analytics, Managers of these three companies were able to take a fact based decision thus justifying the investments by the organization to the human resource projects. Measuring the performance and productivity of each employee has become easier with the help of HR analytics. Hence, it can be concluded that HR Analytics is aiding the HR Managers to make a strategic decision based on reliable data and also helping them to resolve various issues faced by human resource managers. HR analytics is indeed a cutting edge tool which helps the human resource management to resolve many critical issues. The dawn of the new era has arrived for human resource management with the emergence of new IT based Technology like HR Analytics.

### Conclusion

After thorough analysis of the literature available in the internet and the case studies provided by a few companies, it can be concluded that HR analytics has proved to be the boon for HR managers. Today’s challenging economic scenario is demanding every organization to align its HR strategy with its overall business goals. HR analytics thus helps the HR managers to formulate the strategy which is in

alignment with its overall goals. The challenges and issues faced by HR managers are really intense but HR analytics assists them to make a better decision which will lead to increase in productivity and thus increase in revenue generation for the company. Thus, indeed the dawn of new era for Human Resource Management has arrived with the emergence of new IT technology HR Analytics. Hence it can be concluded that HR analytics has helped the HR managers to make a strategic decision which has helped in having the competitive edge over its competitors. Hence HR Analytics has re-invented human resource management thus guiding HR managers to make a fact based decisions which are based on the reliable data.

### References

1. Suengkamolpisut W. Strategic HR roles to create competitive advantage for organizations (Article of Business Sight), 2010. Retrieved on 26<sup>th</sup> November’ 2014 from <http://www.nationmultimedia.com/business/Strategic-HR-roles-to-create-competitive-advantage-30210019.html>
2. Ulrich D. Measuring Human Resources: An Overview Of Practice And A Prescription For Results, Human Resource Management, Fall 1997; 36(3):303-320. CCC 0090-4848/97/030303-18, Retrieved from <http://www.e-rh.org/documents/ISO/measuring-hr-kpi-for-hr.pdf>
3. HR Analytics (n.d), Data to Information to Strategy to Innovation, Analytics HR Blog, Retrieved from <http://www.analytics-hr.com/>
4. Nerney C. How HR Analytics can transform the workplace, Article of Cite world on Big Data & Analytics, 2014. Retrieved from <http://www.citeworld.com/article/2137364/big-data-analytics/how-hr-analytics-can-transform-the-workplace.html>
5. Fiore J, Houston J. Deloitte workforce Analytics the Three Minute Guide, (Brochure by Deloitte), 2014. Retrieved from <http://public.deloitte.com/media/analytics/3-minute-guide-to-workforce-analytics.html>
6. Rouse M. Human Resource Analytics (talent analytics), Article posted in search financial applications. tech target, 2012. Retrieved from <http://searchfinancialapplications.techtarget.com/definition/human-resources-analytics>
7. Aquire (n.d), People Fluent OrgPublisher Premium brochure, Retrieved from [http://aquire.com/resources/dyn/files/1272655zb4b78ec5/\\_fn/WPA OPSAP+Datashet\\_FNL.pdf](http://aquire.com/resources/dyn/files/1272655zb4b78ec5/_fn/WPA OPSAP+Datashet_FNL.pdf)
8. Lombardi M, White D. Analytics into action: Workforce Planning for Talent Success, Research Paper Aberdeen Group, 2012, 12.
9. Saba J. Workforce Analytics: Key To Aligning People To Business Strategy, Research Paper Aberdeen Group, 2010, 6.
10. Aquire, With Designs on A More Efficient Organizational Charting Solution, Autodesk Switches To Aquire and Enjoys Better Workforce Decisions Autodesk Case Study, 2010. 10-Aqu-335 / 12.01.10