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# **Mining the Gold from Your HR Data**

Gaining Competitive Advantage Through HR Data Analysis

By: Beth Patterson and Steve Lindsey



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### The Human Resources Environment

The Human Resources (HR) function has changed. Over the last decade the role of HR has migrated from an isolated back office and occasionally bureaucratic function to one that is viewed and leveraged as a competitive advantage to achieve strategic business objectives. Technology has been a critical enabler of this transformation; however, it is our experience that most organizations do not realize the full potential of the benefits this technology offers. An immense amount of data is available within any organization, but often it is not being leveraged to identify potential areas in which to gain competitive advantage. There is gold in that data that has yet to be discovered. This article focuses on gaining competitive advantage through HR data analysis.

Until the 1990s, executives typically viewed the HR function as a necessary administrative expense or as part of the cost of doing business. As technology evolved, it became a vehicle to gain efficiencies within the organization, especially in those areas where the volume of information and transactions were high -- making the HR function a perfect candidate for automation. As the economy began to expand in the mid to late 1990s, workforce demographic shifts became obvious, and the war for talent became a hot topic in many boardrooms. CEOs began to realize the value of a strategic HR organization.

While some organizations have embraced the concept of a strategic HR function, others still have not. The latter are losing competitive ground and eventually will be forced to re-evaluate their HR delivery models. The days of HR's solely filling the role of a transactional taskmaster -- submitting medical forms, updating contact information, realigning 401(k) investment allocations, and filling staff openings -- will soon disappear.

Technology has played a key role in allowing HR functions to become more strategic. The basic HR administrative and transactional responsibilities must still be done and be done well. This demand has not changed for any organization; however, technological advances allow these transactions to be less paper intensive and provide the capability to shift transactional responsibilities and routine inquiries to employees and



managers through self-service features. With routine transactional duties distributed throughout the organization to managers and employees, HR professionals are freed to contribute more strategically within the organization.

While the advantages of technology in the area of self-service capabilities are currently being explored by most organizations, many other organizations have not yet realized the competitive advantages of using the vast amount of data available to them within their current HR system. Similar to a miner having a map and searching for gold, organizations are beginning to realize “there’s gold in them thar data.” This article will focus on what we believe is the next step in HR’s continuing evolution: Gaining Competitive Advantage Through HR Data Analysis. Combining HR data with other business or environmental information allows organizational leaders to act faster and make better decisions to achieve business objectives.

By marrying quality people information with key business data, decision-makers can gain a better understanding of business processes and drivers. Discussed below are the four key nuggets in which competitive advantage, or the “gold,” can be achieved by leveraging HR data:

1. Turnover Analysis
2. Cost Analysis
3. Workforce Planning
4. Employee Development

### **Nugget #1: Turnover Analysis**

One area to mine gold is through turnover analysis. Understanding turnover and its drivers can provide an organization with key information to manage staffing needs and proactively manage associated costs. Significant competitive advantage can be gained in the marketplace if an organization proactively manages and controls turnover.

The widespread focus on talent shortages in the late 1990s helped to put HR practices in the spotlight and to gain HR leaders a seat at the executive table. The low unemployment rate, in conjunction with the shifting demographics of the workforce (mass exodus of baby boomers, increase in minority representation, etc.) and the huge demand for technical skills, forced C-level executives to educate themselves on the importance of culture as a key differentiator in the marketplace. Suddenly, an organization’s culture and HR practices supporting it

#### **Typical Advantages of HR Data Systems**

- **Transactional data processing** – automating processes with high volume, complex, and frequently accessed data
- **Business data analysis** – manipulating information to allow managers to make timely decisions
- **Employee access** – allowing the employees to better manage information relating to their job function and personal data



became a focal point for investments and discussions in the executive suite. While the availability of funds was a breath of fresh air for HR executives, the pressure to perform was never more intense. As the economic downturn began in 2001 and unemployment rates began to rise, we have seen the emphasis shift from investment to efficiency regarding HR functions. While the overall unemployment rates have risen,

evidence is available showing that the war for talent is still raging for certain skill sets (nursing, systems engineering, etc.).

For example, our studies show that over 85 percent of hospitals have nursing shortages. This begs the question: Why is there a shortage? The answers are disturbing for health care HR professionals challenged each day to solve the problem. Significant contributing factors to the shortage of nurses include:

- In 1984, 51.8 percent of registered nurses (RNs) were under the age of 40. In 2000, that number dropped to 31.7 percent.
- With a current average RN age of 45 and a high burnout rate, the RN ranks will thin considerably over the next five to ten years.
- Since 1995, enrollment in U.S. nursing schools has declined steadily. Since 1993, enrollment has decreased 22 percent.



#### Questions to Answer with a Turnover Analysis

- Are particular areas of an organization turning over more employees than others?
- Are particular geographic regions more susceptible to seasonal turnover than others?
- Can trends be identified that will help to streamline sourcing, hiring, and retention practices?

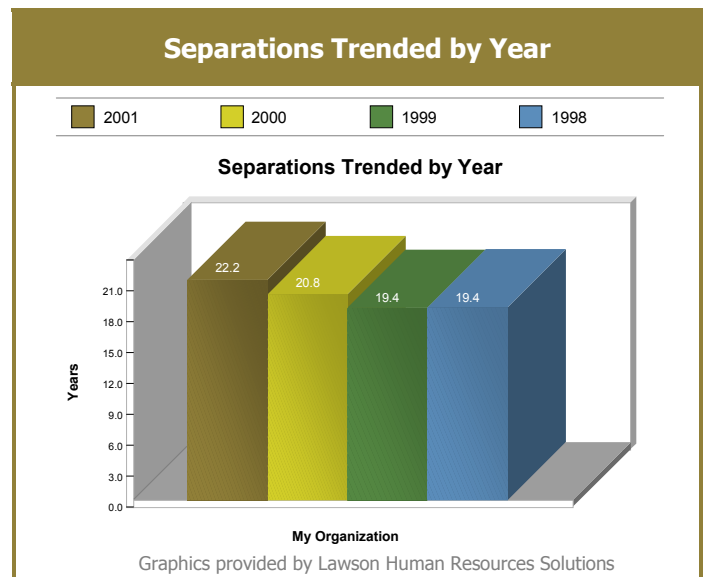
As health care HR professionals begin to understand the talent supply market drivers for nurses, they are better able to position retention-focused initiatives within their organizations. Simply placing an advertisement for an RN is no longer an answer in this scarce talent environment. The focus must shift to

retaining the talent already existing within the organization in addition to creative recruiting strategies.

While turnover is a continuous cycle in any business, it is costly and disruptive and can have a significant impact on an organization's ability to compete, especially when specific skill sets, as in our RN example, are involved. For example, a health care organization with 1000 RNs on staff with a turnover rate of 26 percent will spend \$23M annually due to RN turnover. Even a 1 percent decrease in RN turnover will result in an approximate annual savings of \$1M. Not only will the organization gain a competitive cost advantage, but also by understanding and reducing turnover it will be able to maintain superior patient service by offering the skills necessary to deliver quality health care. Through turnover analysis, an organization can truly mine the gold.

### Identify and Analyze Trends

A key component to turnover analysis is the ability to identify trends and to understand the reasons behind them. Perhaps external market factors are at work, prompting employees to leave one company for another. Or, perhaps internal challenges are leading to increased turnover within a particular business unit. By combining turnover trend data with data gathered from existing HR practices, such as exit interviews, turnover analysis can either validate or invalidate an organization's assumptions regarding turnover drivers. Analyzing key turnover statistics (including total company turnover, turnover by position, turnover by particular geographic region, turnover within a particular function, and turnover by location) can help to identify critical drivers.

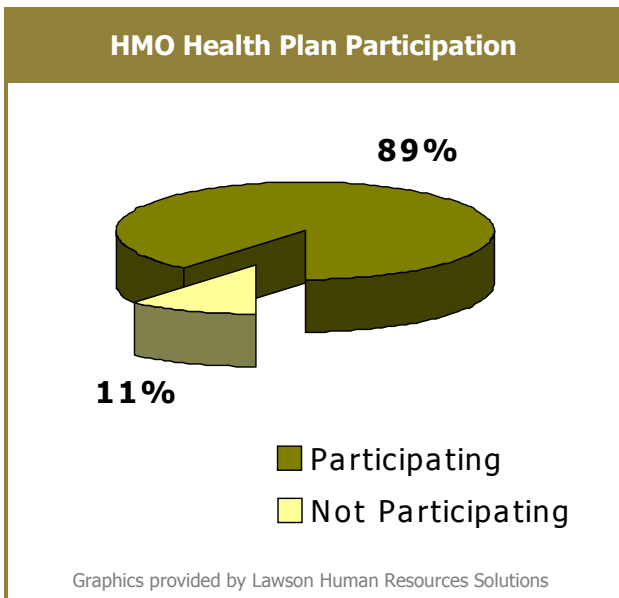


In addition, other key details, such as workforce demographics, e.g., age, race, gender, and average length of service, can be analyzed to assess any potential diversity issue within the organization. Turnover trend data can also be compared to national and local employment statistics to accurately gauge if the turnover is comparable with the current employment market. Continually analyzing turnover trends enables an organization to understand and respond to issues prior to their becoming a disruption to achieve business objectives.

### Nugget #2: Cost Analysis

Aside from the obvious cost implications that employee turnover presents, consider additional costs such as labor, benefits, incentives, etc. Labor cost is usually one of the largest, if not the largest, expenses for most organizations. Instant access to labor-cost information is critical to determine not only allocation of vital resources, but also whether the organization is successful in its hiring, retention, and development practices. As

with turnover, by comparing trends and ramp-up costs for new hires, a cost per employee can be calculated to include both opportunity and new-hire training costs.



### Soaring Benefits Costs

Company-provided benefits are another enormous cost to manage. For most companies, benefits cost 35 percent to 40 percent of payroll. With the wide array of benefit plans offered to employees, it is important to understand utilization and participation to ensure that benefit funds are being used to their full advantage. Participation rates are key employee data to be mined. As the costs of employer-provided programs and insurance premiums rise at an ever-increasing rate, awareness of the organization's spending on these programs is critical to maintain adequate cost controls. Understanding employee participation rates can provide

justification for future resource allocation to a particular program or for negotiating leverage for more favorable contracts with providers. In addition, by analyzing injury and Workers' Compensation claims, historical data can be maintained to manage any potential safety or worker health issues.


### Case Study

One example of leveraging cost information comes from a small manufacturing company with 800 employees located in five plants throughout the United States. This company discovered the advantages of using its data to understand the effectiveness of its incentive program. The company experienced significant business cycles and had adopted the philosophy that a moderate incentive pool would be planned each year regardless of the market influences. Although the natural market shifts might have a slight impact on the overall pool, the company decided to distribute incentives in the good and the bad years.

Prior to our involvement, this company did no analysis of its incentive distribution. Top executives received pools of funds to distribute at their discretion. As part of an overall engagement to redefine the compensation structure, we performed an analysis of

### Questions to Answer with Cost Analysis

- How many employees are participating in each benefit plan type?
- What type of Workers' Compensation claims are we experiencing and how much is it costing the organization?
- How many incidents/accidents are reported for each business unit?
- Is our incentive distribution correlated to business unit performance?



incentive distribution. Based on this analysis, we concluded that incentives were inconsistently distributed, ranging from 0.5 percent to 26 percent of base salary. Analyzing the information for plant managers only and then comparing the incentive distribution with plant performance data was extremely enlightening for the company executives. No correlation existed between plant performance and incentive distribution. Obviously, this organization was not achieving the desired impact from its incentive investment. With this cost analysis, the company restructured its incentive plan to drive performance throughout the organization.

### **A Benefit from Benefits**

This is a prime example of how the right technology in the right hands can have the maximum impact on workforce performance. Fiscal controls and assurance that funds are providing maximum benefit for the organization and its employees can save significant capital that can then be redirected within the organization. Controlling costs and maximizing the use of each dollar invested is a key element in achieving competitive advantage.

### **Nugget #3: Workforce Planning**

Competitive advantage is achieved by having the necessary business-related talent available to execute your business strategy. Workforce planning is the constant review and management of an organization's workforce needs. Effective workforce planning is achieved when the process of maintaining current workforce data, forecasting future workforce needs, and identifying current talent gaps is streamlined.

A fundamental function for most HR systems is to build positions and job descriptions, including the key competencies, educational and physical requirements, and experience necessary to successfully perform a particular job. Armed with this information, along with an understanding of the market forecasts and business strategy, an HR leader can more efficiently source, recruit, and staff for future business needs. This is how to make technology work for HR – effective workforce management.

### **Filling Vacancies**

Anticipating workforce needs is a critical component of filling positions quickly and, thereby, remaining productive and competitive. Leveraging existing HR data to anticipate and plan for future needs is absolutely critical. Once the needs are identified, the ability to quickly source individuals to fill positions can often be vital for an organization's success. Filling open positions internally is often the most expedient path to meet immediate staffing needs. Easy access to information showing the credentials and capabilities of internal employees, e.g., their current role, work experience within and outside of the organization, languages spoken, and openness to relocation, allows HR to quickly identify internal candidates for particular staffing needs.



## Qualified Employees Listing

Position	Description	Job Code	Description	Qualification	Subject	Essent
10	Project Manager	10	Project Manager	Bachelor of Science Certified Project Manager	MANAGEMENT	Y Y

Employee	Name	Gender	Current Salary	Job Code	Supervisor	Source
159	Beaudoin, Lisette	F	\$65,409.0000	10	Marshall, Edward	CURR
165	Davis, Betty B	F	\$80,000.0000	10	Marshall, Edward	CURR
413	Jones, Mary	F	\$46,000.0000	10	Allen, Ronald L	CURR

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### Succession Planning

Succession planning is another important program that can provide competitive advantage. It is important that an organization never be vulnerable because of the unexpected departure of a key employee. By early identification of individuals primed for advancement, an organization can effectively recover when a key individual leaves. Leveraging data within the HR system can also provide valuable gap analysis information to guide development plans and assignments for succession candidates. Be proactive. Insist that your ERP systems can be queried to provide replacement candidates when necessary, as well as a fit/gap analysis for skills or competencies.

### Understanding Past Successes

Another key area of workforce planning is the analysis of HR data to understand past successes. For example, it is important to understand the success of recruiting sources to determine where to invest recruiting funds. Consider the case of a large global technology company that hired more than 29,000 employees within one year. Unfortunately, it had no idea how many of those new hires matched its critical skill sets. Recognizing talent acquisition as a critical business success factor, the company began to analyze its workforce planning, sourcing, recruiting, and induction process data. After clearly articulating the critical skill sets, including network, systems, and various other engineering disciplines, the company gathered data

### Questions to Answer with Workforce Planning Analysis

- Which employees speak a particular language fluently?
- How many employees are in a particular job classification?
- Which employees have a particular skill set?
- How many employees were rated with our highest performance rating and who are they?
- How successful are our various recruiting sources?
- Which employees have completed a specific development activity?



to understand its acceptance rates, cost per hire, and retention rates. It identified several sources for the critical talent and began tracking the effectiveness of each source. Once it understood this information it could direct talent acquisition investments strategically.

Accurate, proactive workforce planning provides competitive advantage. Just as a gold miner performs research prior to panning for gold, so must the HR manager leverage available information to plan successfully for labor needs.

### **Nugget #4: Employee Development**

A key differentiator for many organizations is how well they provide development opportunities for employees. Employee development provides competitive advantage by (1) enhancing the skills and knowledge of the workforce and (2) increasing retention rates of key employee groups. Employee development occurs in a number of methods, most notably through formal training programs and development assignments. Specific data analysis in the area of formal training programs might include:

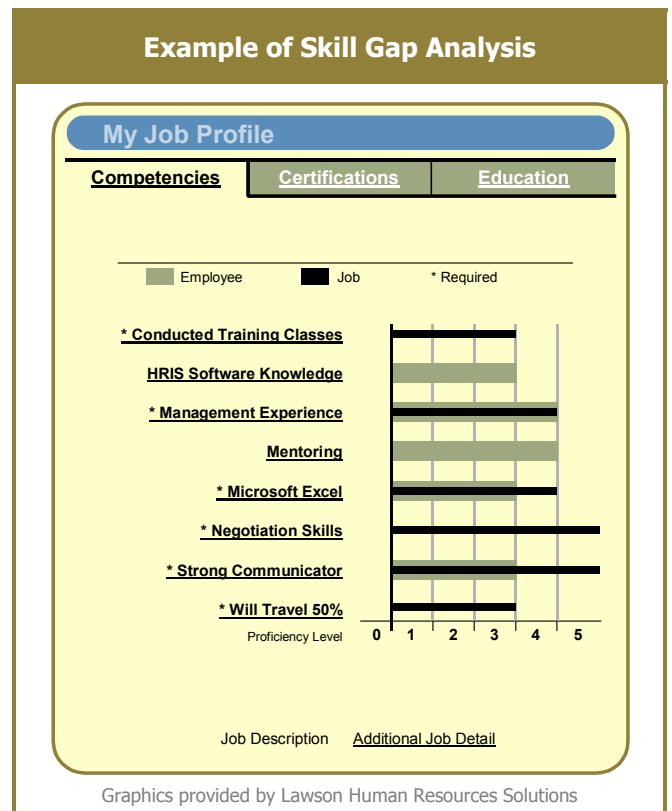
- **Costs** - The benefit must outweigh the cost. By compiling training-related expenses, an organization can determine the total cost for each training program by region, location, or employee demographic. This data can be compared to impact data to demonstrate ROI for individual training programs.
- **Utilization** - By tracking employee completion and enrollment rates, an organization can determine a measure of program usage. The best training program in the world is useless unless measures are in place to ensure its effective implementation.
- **Training impact** - Are employees applying what they learned during training? Are specific work-related behaviors changing in accordance with learning objectives? By identifying data elements that can measure pre- and post-training performance, an ROI analysis can be completed to assess the success of a company's training program. For example, an organization could measure sales revenue before and after implementing a sales training program. Another area relating to training impact is its

#### **Questions to Answer with Employee Development Analysis**

- Which employees have attended a required training event?
- Which employees are enrolled for a specific training class?
- What is the retention time of employees who have completed a specific development activity?
- What is the correlation between performance ratings and participation in specific development activities?
- What is the correlation between business unit performance and the implementation of a development program?

effect on employee retention and advancement. Are employees progressing as expected? Have retention rates improved? Has individual performance improved?

In addition to formal training programs, developmental assignments can be tracked in an HR system. Over time, an organization can construct successful career paths and gain insights into key development needs by analyzing the data available. Skill gap analysis can be done for individual employees identifying gaps to close to meet desired job requirements. Managing investments in all areas related to employee data will not only provide organizational leaders with the confidence that they are getting a return on these investments, but also position the future leaders of the organization for success.



## Summary

During the last decade, most organizations have implemented some form of HR Information System to leverage the significant advances in technology. By leveraging this technology to assist HR with its transactional functions, many HR departments have been able to position themselves to become fully recognized business partners within the organization. However, once at the executive table, very few HR leaders have been able to provide the hard analytical data to support strategic business decisions, even though the data exists. We see HR executives becoming much more analytical in their approach and much more business focused with recommendations and guidance. There is no question that leveraging HR data provides competitive advantage in the areas of turnover analysis, cost analysis, workforce planning, and employee development. The question that remains is: Can HR provide the analysis in a timely and well-understood format? To survive in a competitive market, the answer should be a resounding YES!

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