



Moving Beyond “Data Rich, Knowledge Poor” in Human Resources

*Bring workforce intelligence into
sharper focus with advanced analytics*



What if...

...you could predict who was going to resign from your organization and why...months before they tendered their resignation. Would it change the game on how you manage and retain your high performers?

...you could triage your resumes and score them on the fly as to who has the highest probability of being a high performer, allowing you to deploy your limited recruiting assets to the highest return on investment. Would it change the perception of your recruiting organization from a reactive to a proactive organization?

...you could manage your workforce costs on a daily/weekly basis and run different scenarios as the marketplace changes around you. And once you set a plan, monitor pay periods against key workforce performance and business value metrics. Would it change the conversation in the c-suite?

Senior executives are, in essence, flying blind today when it comes to one of the largest expense items in the P&L – the workforce – and the many related corporate resources that support it.

Think about it. In many companies, the workforce is the most prolific user of real estate, information technology, and other key corporate resources. Between 40 percent and 70 percent of most companies' operating expenses go toward meeting compensation, benefits, and other employee-related expenses.¹ Yet beyond basic cost figures and employee demographics, senior executives usually have little or no insight into how these expenses and resources relate to broader corporate issues.

In many companies, virtually every other area of the enterprise has been wired to "business intelligence" software and dashboards that help executives make critical operational decisions about cash flow, manufacturing, supply chain, and financial reporting. So why is there such a giant blind spot when it comes to the workforce? How much more effectively could executives manage the major assets of the business if they had visibility, at a very granular level, into workforce trends, performance, and needs?

A key challenge that forward-thinking executives face as they try to elevate HR's strategic value to the enterprise is this: although a wealth of workforce-related data resides in ERP systems, HR "point solutions," and other repositories, businesses often don't adequately consider what to measure in order to link workforce activities to broader business strategies, problems, and opportunities. The result is a gaping divide between petabytes of possibly relevant data and the business issues to which it might be applied.

Deloitte* believes a way to bridge this gap – and to make a gigantic leap forward in overall strategic planning – is to adopt a top-down approach to "workforce intelligence." Such an approach can help you focus first on identifying specific business issues and then use advanced analytics to convert workforce data and other inputs into actionable business information.

This approach could be as productive today relative to workforce management as broader business intelligence has been in the past decade. It can equip executives with a whole new dimension of decision-making power – a capability that addresses many of last century's lingering human capital challenges with 21st century speed, adaptability, and focus on shareholder value.

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¹ 2008 Deloitte Consulting research based on multiple sources.

New expectations, old challenges

For the better part of a decade, organizations have invested heavily in large-scale enterprise systems to promote data-driven, strategic, and operational decision making. In that time, the enterprise has re-engineered customer relationship management, product design, manufacturing, and supply chain operations to gain efficiency and promote deeper analysis of corporate data. Along the way, companies have learned ways to capture and measure data at many layers of granularity to help guide decision making and identify areas in which higher performance can be achieved.

One area that has eluded such analysis and measurement in many companies, however, is human capital. People-related costs can be one of the single largest line items of the P&L, yet the greatest refinements in the HR function have been in its administrative activities, such as compensation and benefits, on-boarding, and training.

Not surprisingly, an area that represents such a large percentage of the P&L should attract the attention of the C-suite and raise the question: *How can we use human capital more effectively in addressing our company's most pressing business issues today, including new product development, market expansion, and mergers and acquisitions?*

We believe the answer to this question lies in the convergence of several recent trends:

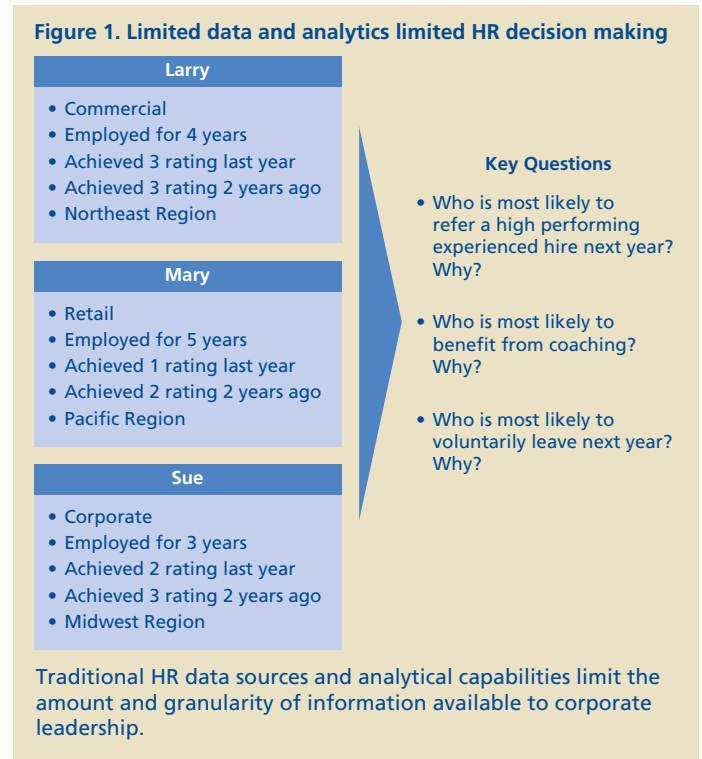
- A shift in HR leadership, both in terms of the background and expectations of its leaders. Often today's HR executives have operational backgrounds and understand the need to better align staff-related functions such as recruiting, compensation, and employee development with critical business activities.
- How technology is being deployed and leveraged, both in HR and across the enterprise. IT departments have spent years consolidating data repositories, thereby making much more data available to management now than ever before – the question often left hanging in the air is how to use it most effectively.
- Increased use of advanced analytics tools and models. In the past five years we have seen exponential growth in the use of advanced analytics to mine vast data sets and identify previously unseen relationships.

From an HR and workforce perspective, a sizeable gap is created when the IT department announces that this wealth of enterprise data about the workforce is available. The problem is that few managers across the enterprise are trained to mine this data for workforce intelligence – certainly not likely in the same way they are for financial and operational data.

If, instead, senior executives were to identify specific workforce-related issues that are critical to the business – we offer several examples in the following section – and then managers were trained in fundamental analytics so they could mine the available data more effectively, they could produce insights that should help leadership with decision making. In this way, companies may very well see the same type of performance improvement rigor in HR that businesses have become accustomed to in other areas of the enterprise.

Applying advanced analytics to the HR realm

Traditional availability and uses of HR data (or lack thereof) make it difficult to distinguish between individual employees or identify opportunities to enhance employee retention, coaching, and recruiting (Figure 1).



But by applying advanced analytics, the organization can more effectively use available internal and external data to better understand and then more accurately predict future events at the customer or employee level (Figure 2). The concept creates value for the business by focusing resources on the right employees at the right time, to improve the outcomes (Figure 3).

Figure 2. Expanded data sources and advanced analytics can improve management insight into workforce data

Larry	Mary	Sue
<ul style="list-style-type: none"> • Promoted 2 years ago • Worked 1,975 hours last year • Worked 2,184 hours prior year • 15 vacation days taken last year • 14 vacation days taken prior year • Supervisor achieved 2 rating last year • Medium supervisor turnover • One past new employee referral • Commute >25 miles • Medium regional turnover last year • Low regional economic growth • Received recognition award 3 years ago 	<ul style="list-style-type: none"> • Promoted last year • Worked 2,470 hours last year • Worked 2,500 hours prior year • 12 vacation days taken last year • 13 vacation days taken prior year • Supervisor achieved 3 rating last year • High supervisor turnover • No past new employee referrals • Commute 15-19 miles • High regional turnover last year • High regional economic growth • Received recognition award 2 years ago 	<ul style="list-style-type: none"> • Promoted last year • Worked 2,210 hours last year • Worked 2,204 hours prior year • 15 vacation days taken last year • 13 vacation days taken prior year • Supervisor achieved 2 rating last year • Low supervisor turnover • Four past new employee referrals • Commute <5 miles • Low regional turnover last year • Medium regional economic growth • Received recognition award last year

Predictive models built from many different types of data elements can quantify the likelihood of, and predict reasons for, future individual employee events.

Figure 3. Greater insight can lead to new strategies for workforce development and retention

Larry	Mary	Sue
<p>Key Insight</p> <ul style="list-style-type: none"> • 25% more likely to benefit from coaching <p>Top 3 Reason</p> <ul style="list-style-type: none"> • Static Rating • Long commute • Medium supervisor turnover <p>New action and benefits</p> <ul style="list-style-type: none"> • HR proactively calls supervisor • Supervisor and Larry determine coaching would be beneficial • Coaching increases Larry's future value to company by \$100K 	<p>Key Insight</p> <ul style="list-style-type: none"> • 40% more likely to leave company next year <p>Top 3 Reason</p> <ul style="list-style-type: none"> • Hours worked "above average" for the last two years • Supervisor's past retention rate is low • High regional turnover rate <p>New action and benefits</p> <ul style="list-style-type: none"> • HR proactively calls Mary • Meets with regional manager • Transfers to a different department with new supervisor; Mary is now only 10% more likely to leave, resulting in \$50K benefit 	<p>Key Insight</p> <ul style="list-style-type: none"> • 75% more likely to refer successful new hires <p>Top 3 Reason</p> <ul style="list-style-type: none"> • High number of past referrals • Supervisor's past retention rate is high • Hours worked "average" last two years <p>New action and benefits</p> <ul style="list-style-type: none"> • HR proactively calls Sue • Sue is placed on company recruiting committee • Sue identifies three additional people who are recruited into the company, resulting in \$200K benefit

Though the three employees are similar in some ways, a closer look brings to the surface the different strategies managers can apply to engage these employees in new ways to bring greater value to the company.

Implementing a top-down approach, powered by advanced analytics, can help corporate executives better plan and forecast in core HR-related areas such as: talent retention, recruiting, workforce planning, mergers and acquisitions, safety, and span of control. Following are three examples of how advanced analytics can fuel business-driven decisions in the HR space.

Staff retention

A large retailer wants to improve its store profitability. Among the options the company considers are a new product mix, pricing changes, or updated stores. But after some analysis, the executive team discovers that what differentiates the most-profitable stores from the least profitable is management turnover.

Further analysis shows that by reducing store manager turnover by just three percent, the enterprise can see a significant increase in store profitability and, ultimately, earnings per share. Backed by this data, the retailer turns its attention toward a new goal: reducing store

manager turnover. Based on this goal, the organization can turn its attention to identifying factors that influence turnover and how, then, those factors can be controlled.

Recruiting

When online career sites became the job-search resource of choice in the late 1990s, they revolutionized corporate recruiting. Web sites were soon followed by online systems that automated the applicant tracking process within human resources. But nearly 10 years later, most résumés submitted online must still be reviewed manually by recruiters to capture the essence of an applicant's qualifications. Much of this time could be used for other higher value activities. Moreover, faster review could help identify high-potential candidates faster, possibly avoiding the loss of that candidate to a faster-moving company. By adding workforce intelligence modules to the front end of automated systems, you can create a very different approach to recruiting.

Take, for example, an open position for sales manager at a high-tech firm. If you apply advanced analytics to the firm's performance management system to uncover the attributes of the highest-performing sales managers based on your firm's definition of and criteria for "high performance." Backed by data to support the makeup of a strong sales manager for this particular business, you can apply it to the front end of the recruiting process.

When a resume arrives, advanced analytics systems can triage them automatically, searching for those attributes you've identified and showing recruiters which candidates have the highest probability to be effective sales managers at the firm. What's more, this advanced analysis flags the candidates with attributes that balance the future needs of the company with what has worked well from a talent perspective in the past.

Workforce planning

A common challenge facing organizations is how to align revenue forecasts and product demand with workforce planning. Given the cost pressures of the global economy, it's even more essential to know the company's true workforce costs down to the person and the activity. Because information in many companies is still largely siloed by functions, talent decisions are often made without considering those forecasts – long- or short-term. Advanced analytics can pair those pieces of information to help the enterprise meet its financial goals.

You can use analytics for workforce planning in response to the ebb-and-flow of regional economic conditions. For example, a company might find that it has a surplus of managers in the Northeast but a deficit in the Southeast. A traditional response to this scenario would be to ramp-up recruiting in the Southeast and hire more people. The costs of this approach aren't measured solely in economic terms. The cost of hiring and onboarding, and the standard six-month assimilation process takes a budgetary toll. Meanwhile, in the Northeast, employees in the same job family are being laid off. This process comes at a cost as well, including severance and outplacement expenses.

If the enterprise had better visibility into regional economic forecasts, demand planning, and workforce data, the planning process could be improved considerably by moving surplus staff to the region with the greatest need. Using advanced analytics, your enterprise can better understand and predict not only what the open positions are, but who should be in those positions — and when.

Take the next step: Identify burning issues that HR can help address

Facing the current trends in workforce demographics, growing skills shortages, and increasing competition for talent around the world, senior executives today need a better understanding of workforce dynamics. What is the likely make-up of our company from a demographic perspective in the next three to five years to keep the business competitive? Where will those people need to be deployed? What corporate resources will be needed to support them? How will those dynamics change over time, and in what ways can the business prepare to adapt?

If corporate leadership cannot readily answer these critical questions, they are effectively operating with blinders on when it comes to this crucial area of the enterprise. The challenge is deciding what workforce issues need to be measured and then bridging the gap between the vast stores of enterprise data that may be available – especially that which relates to your workforce – and the strategic business issues that your executive team needs to address.

By taking a more strategic approach to decision making and using advanced analytics to turn HR data into actionable business intelligence, companies can leverage their existing ERP systems, data warehouses, and smaller-scale HR point solutions for critical insights into the workforce. These insights, in turn can help guide decisions that are critical as the business confronts a range of issues. We believe this capability is not a "nice to have" – it's a "must have" going forward.

In many organizations, the first step toward this capability has already been taken: reinforcing and upgrading their IT infrastructure and then consolidating and standardizing data sources across the enterprise. The key to turning this infrastructure and the data it produces into workforce intelligence is the next step that companies need to take: implementing a strategic approach by which senior executives ask the right questions involving HR and the workforce, and then applying advanced analytics to the data to find the answers. Such an approach requires:

- Understanding and quantifying the human capital components of your company's most pressing business issues today.
- Formulating the key, strategic workforce-related questions relating to these issues.
- Mapping these questions to your enterprise data sources – as well as external, third-party information as necessary – to determine whether you have the information needed to find answers.
- Using advanced analytics to explore scenarios that answer the questions and address the risks and opportunities associated with the issues.
- Examining issues cross-functionally rather than by traditional silos.

We believe that this aggressive, yet measured, approach can help transform your HR function from "data rich, knowledge poor" into an indispensable part of your enterprise that delivers powerful, actionable workforce intelligence to support growth, innovation and profitability.

About the Authors

John Houston is a Principal with Deloitte Consulting LLP in their Human Capital service area and is a national co-leader of the Advanced Quantitative Service line. In his twenty years of experience, he has led consulting services in support of the design, development and implementation of multiple predictive models for many large Fortune 500 companies including a large national personal lines carrier, commercial insurer, and a workers' compensation carrier. He has also designed tools to be used to monitor the benefits of implemented predictive models.

Russ Clarke is a Director with Deloitte Consulting LLP in their Human Capital service area and has over 28 years experience in consulting, industry and technology. Prior to joining Deloitte, Russ was the founder and CEO of a ventured-backed human capital software company specializing in workforce alignment and analytics technology. Russ established the business, oversaw the growth of the company and the deployment of the technology into large-scale, Fortune 200 companies.

John and Russ are co-leaders of Deloitte's Workforce Intelligence service offering, which combines deep knowledge in human capital strategy and program implementations with advanced business intelligence capabilities to help clients gain visibility into data so that they can make informed and timely "data-driven" business decisions.

For more information, please contact:

John Houston

Deloitte Consulting LLP
Tel: 617.437.3993
jhouston@deloitte.com

Russ Clarke

Deloitte Consulting LLP
Tel: 212.313.1970
rclarke@deloitte.com

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