



## Big Data: HR's Golden Opportunity Arrives

## ABSTRACT

With the arrival of Big Data, HR is faced with an unprecedented opportunity to become more data-driven, analytical and strategic in the way that it acquires talent. Indeed, HR has spent much of the past decade trying to find increasingly better ways to apply metrics and analytics to its human capital decisions. Now, powerful new technologies make it possible for HR to blend its internal data with an unprecedented amount of data from external sources to make evidence-based talent management decisions and to raise the department's profile as a strategic partner to senior leadership. This is particularly true when it comes to job boards, which continue to be a top source for employers to tap into active job seekers. Today's more evolved job boards provide a goldmine of information, and the need for HR to successfully leverage this information to win the war for talent has never been greater. Thanks to the growing number of software vendors that have been successfully gathering and analyzing vast amounts of talent-related data, HR can now turn to these experts for much-needed assistance in launching their own talent-related Big Data initiatives. (Note: For the purposes of this article, the term "talent management" refers to the life cycle of activity that begins with talent acquisition and selection and extends throughout their development, promotion and retention.)

## Big Data: HR's Golden Opportunity Arrives

Big Data can help HR find and hire the right candidate for every position in the organization—faster and more cost-effectively.

**With the advent of Big Data, HR is poised to become more evidence-based and a true strategic business partner to senior leadership.**

It's clear that companies across the world are making a big investment in Big Data. *The Wall Street Journal* recently reported that 85 percent of Fortune 1000 executives have projects planned or underway for getting more business value out of data their companies generate and collect. And a recent Gartner report projects that Big Data will account for \$28 billion of IT spending globally this year and will increase to \$34 billion in 2013.

What isn't so clear is exactly how they will extract real business value from the vast amounts of data they gather. At this early stage of the game, companies are already awash in data. They know there's value to be mined from the data but they're unsure of where to focus their attention, how to unearth the insights buried deep within the often-unstructured data, and how to act on their findings with sufficient speed and purpose. These challenges are understandable. After all, we're entering a promising new frontier that hasn't been mapped out yet. We're blazing trails with technologies and software so astonishingly powerful that we're literally inventing new ways to apply them.

Even in the face of these challenges, Big Data holds tremendous business potential. And for Human Resources, in particular, Big Data offers an historic opportunity: the opportunity to make the most rigorously evidence-based human capital decisions ever made. Big Data can help solidify HR's reputation as a strategic business partner that makes analytics-driven, evidenced-based decisions, especially when it comes to talent acquisition. Big Data-fueled hiring means getting the right people into the company at the right times, the first time. It means improving candidate sourcing and selection, speeding up the hiring process and reducing costs, all of which equate to significant competitive advantages.



## Big Data & HR: Made for One Another

In many ways, Big Data and Human Resources are a natural fit. HR already “owns” much of an enterprise’s most valuable internal data: its human capital information. In fact, HR departments have long invested in software and systems devoted entirely to capturing, reporting and securely storing its people data. HR also spent the better part of the past decade investing in solutions to manage human capital more effectively. According to Gartner, global spending on talent management software rose to \$3.8 billion in 2011, a 15 percent increase over 2010.

If you look at all of these investments in context, you can actually see HR’s gradual movement toward Big Data-style analytics.

- **Step 1: The Use of Anecdotal Evidence**—Before HR information management systems and similar tools were widely available, HR departments were forced to make human capital and hiring decisions based on past experiences, opinions and hunches.
- **Step 2: The Use of Internal Data**—As cost-effective computing and data gathering tools became available, HR then began conducting simple “data dumps” and counts to bolster their decisions.
- **Step 3: The Use of Internal Metrics**—Next, HR improved the quality of its decisions by examining the company’s own operational data—e.g., internal sourcing and hiring metrics. This represents the beginning of HR’s shift toward true talent management.
- **Step 4: The Application of Descriptive Analytics**—The next shift HR makes is toward actual data analysis—looking at information (such as attrition rates) and analyzing past events for useful insights on how to make future sourcing and hiring decisions.
- **Step 5: The Application of Predictive Analytics**—Finally, HR uses Big Data, to determine probable future outcomes of human capital decisions, which represents a significant leap in terms of extracting value from data.

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Big Data offers HR the opportunity to take its evidence-based decision making to an entirely new level by factoring in an unprecedented amount of data from a wide array of sources, some of which might never have been considered previously. Big Data will enable HR to test theories, proactively solve problems and conduct more complex predictive analytics related to sourcing and hiring strategies.

The real value of Big Data is that it gives HR the ability to capitalize on more powerful technologies and an exponentially greater amount of data to make more accurate evidence-based decisions and then take faster action on those decisions. This creates significant competitive advantages—not only in the war for talent but also in the organization's ability to execute its business strategies more effectively. Employers hire for a reason: they have an immediate need for talent that is critical to the execution of their business objectives. Uniformed sourcing and hiring practices lead inevitably to hiring delays and poor candidate selection, and this results in delays to the achievement of business objectives.

### Big Data Defined

The definition of "Big Data" depends on the industry, company or expert offering it. Generally, though, Big Data refers to a collection of large amounts of information and complex data sets from a wide variety of sources. As the experts point out, Big Data initiatives are characterized by three criteria:

- 1) Volume (the data sets used are enormous),
- 2) Variety (data streaming in from a vast number of sources), and
- 3) Velocity (the increased pace at which data is being created and then incorporated into the analytic process and the ability to put the data to use in real time as it streams in).

The main challenge of Big Data, for most organizations, is developing the ability to tap into and extract value from all of this information. It takes tremendous resources and expertise to acquire, normalize, process and analyze Big Data in real time.

In the past, technology and computing limitations made Big Data analysis impossible. Companies wanting to glean insights about their business practices had to scrutinize smaller amounts of data from a limited number of sources. Big Data has changed this forever.

As Dion Hinchcliffe wrote in his excellent article, *How Is Big Data Faring in the Enterprise*, "just like Google enabled the layperson to query the entire contents of the web with a few keywords, the next generation of enterprise big data seems to be about connecting workers with the data landscape of their organizations."

Savvy employers are careful to put their time, money and resources into only the most effective talent sources. Big Data can identify those sources with greater accuracy and precision than has ever been possible.

### Big Data, Talent Acquisition and Job Boards

One factor that makes talent acquisition so ideal for Big Data is that CEOs now view talent as a critical component of the organization's success. In PricewaterhouseCoopers's 15th Annual Global CEO Survey 2012, 66% of the CEOs surveyed believe they need to spend more time developing their talent pipelines. And while almost half of all CEOs are confident their companies will grow over the next three years, only 30% believe they will have the talent they will need. Below are ways that Big Data can help organizations allay some of these CEO concerns.

Big Data's potential for improving talent acquisition was compellingly illustrated in a recent *Wall Street Journal* article titled, "Meet the New Boss: Big Data." The article highlighted the fact that Xerox slashed its call center attrition rate by roughly one half after it began using Big Data to assess job applications. While the company once hired people based on their job experience, new data evidence informed Xerox that experience didn't matter in hiring a good call center worker (in this case, one who would remain employed long enough for Xerox to recover its new hire training investment). Instead, the evidence highlighted that personality was more relevant than experience. After a trial period proved the data to be correct, Xerox began hiring all of its call center employees based on this evidence-based recommendation.

Of course, finding the right sources for talent is just as important as finding the right types of talent, and Big Data can be invaluable in this capacity. Big Data can show employers precisely which sources have the greatest likelihood for generating the flow of the specific types of candidates they need.

Employers need to leverage a mix of sourcing strategies to build their talent pipelines. Savvy employers are careful to allocate their resources—time, money and people—to activities that produce optimal outcomes. Big Data can be leveraged to identify both which sources will be most effective and what the expected volume of candidate flow will be. The forecast for the optimal sources and the anticipated candidate flow can now be made with greater accuracy and precision. The competitive advantage of knowing in advance which sources will produce the best results is clear.

### Job Boards Dead? Far from It!

Sources show that job boards continue to be a top source for tapping into active candidates:

- CareerBuilder's 2012 Candidate Behavior Study reports that 74% of workers are actively searching for or are open to a new opportunity—and over two-thirds of those workers are using job boards to find that opportunity.
- CareerXroads' new report, "2012 Sources of Hire: Channels that Influence," reveals that job boards rank just below referrals as the largest source of external hires.

As noted earlier, HR already has an incredible amount of internal data at its disposal. It has the opportunity to hasten its Big Data initiatives by plugging into external partners that possess the additional data and the specialized hardware and software required. This is an especially attractive approach for organizations that don't want or can't afford to make the infrastructure and other investments to do Big Data in-house.

At eQuest, we have seen firsthand the power and business advantages that Big Data can deliver. For example, we can provide employers with analysis of well over a billion historical job board performance records (e.g., candidate response patterns to job postings) to forecast which online sources will supply the most candidates—and which sources will do this faster and more cost-effectively. This was simply not possible a few short years ago.

Despite the claims of some pundits, job boards continue to be one of the top sources for reaching active job seekers (*see the statistics on left*). They also provide a goldmine of information for employers and HR departments and represent a viable first step into the world of Big Data.

Of course, most employers and HR departments won't have the computing power, the expertise or the storage capacity to launch Big Data initiatives on their own. They'll need the assistance of external partners who have been successfully building Big Data capabilities and personnel over the past few years.

For instance, eQuest has a deep understanding of the various job boards, their performance rates, and how to put them to use effectively to meet specific objectives. In addition, we help employers understand how to measure their sourcing results, conduct reliable benchmarking and extract the maximum return on their job board investments. We also deliver rich labor market intelligence, helping companies recognize the highly complex dynamics of talent supply and demand in global, regional, local and niche markets (including economic and salary-related trends, talent surpluses and shortages, attrition risks, etc.).

Another business advantage that Big Data offers is the ability to eliminate biases among an organization's hiring managers and other key decision makers. Instead of relying on various opinions, beliefs and instincts, Big Data's large data sets and powerful computing technologies impartially identify desirable hiring outcomes.

### The Power of Today's Evolved Job Boards

While the members of the Global Job Board community ranks have changed over the past decade, thousands of job boards continue to fulfill their mission of connecting employers and job seekers. The boards that died off did so not because the job board model itself isn't sound but because they failed to stay relevant to all of their constituents—employers, recruiters, and job candidates.

Some boards failed to update their technology sufficiently. Others failed to understand and respond to the needs and behaviors of their users. Still others failed to deliver the metrics and analytics that employers now rely upon to justify costs and make informed sourcing decisions. The best job boards, on the other hand, have evolved. They remained in sync with their users' needs, making the necessary adjustments and investments to improve sourcing effectiveness.

Matt Ferguson, CEO of CareerBuilder, explains: *"The way companies recruit today is different from ten years ago. Job candidates use up to 15 resources for finding a job, so it's critical to be everywhere they are. CareerBuilder is automating the sourcing and candidate engagement process through our Talent Network solution. SEO, career sites, social media, job aggregation, mobile – we use digital technology to promote job opportunities to candidates at every touch point."*

Today, job boards enable employers to do much more than post open positions. They help employers engage candidates in meaningful ways via discussion forums, blogs, helpful content and other tools. They have become an important resource for employers to establish and promote their recruiting brands.

When asked about this resource, Gerry Crispin of CareerXroads said, *"Job boards remain an essential step in the dance many employers and job seekers perform in order to meet, greet and engage one another. Easily 10 to 20 percent of all hires will be attributed to job boards each year for the foreseeable future."*

Bottom line, today's job boards continue to be a top source for tapping into active candidates and an important part of a sound talent acquisition strategy.

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### The Importance of the Human Element

Despite the relative youth of Big Data, many companies are already losing sight of something crucial—the human element. This is understandable since the technical and technological aspects can pretty easily become overwhelming. But the fact is, Big Data is nothing without the right people.

At its core, the real value of Big Data lies in the answers it can provide, the insights that can be derived and its ability to enable business users to ask new kinds of questions that could not previously have been answered. Big Data only achieves its full potential when this information is analyzed, interpreted, reported and put to use by an organization's people. In this respect, the promise of Big Data could easily be squandered if HR doesn't help to lead the Big Data charge, especially where talent acquisition is concerned.

It's no exaggeration to say that HR will be on the front lines in helping their organizations find the right people with the right skills for putting Big Data to use. According to a report published last year by McKinsey, this won't be easy. The report states: "A significant constraint on realizing value from Big Data will be a shortage of talent, particularly of people with deep expertise in statistics and machine learning, and the managers and analysts who know how to operate companies by using insights from Big Data." McKinsey researchers envision a need for 1.5 million additional data-savvy managers in the U.S. alone to analyze, interpret and share Big Data findings effectively. Obviously, HR will be charged with helping to find these individuals and assisting in the assembly of teams with the right mix of business, analytical and technical expertise to unleash the power of Big Data.

The time has come for HR to raise its profile as a strategic business partner by plugging into Big Data and lifting talent acquisition strategies to a new level of success. Talent acquisition touches every part of the organization. Nothing else is as critical to the organization's ability to achieve business objectives. With help from the right external partners, HR can jump-start their organizations' Big Data efforts, make decisions that are exponentially more evidence-based, and build strategic business advantages that will empower the entire organization.

## About eQuest

eQuest is the world's dominant and most utilized job posting distribution company. Its primary customer base consists of the majority of the Global Fortune 500. It also provides job deliveries on behalf of the world's largest Applicant Tracking Systems, ERP's, and job boards – managing another 20,000 companies through these channels. Present job posting deliveries average 250 million annually. Its Big Data for HR division collects approximately 5 million job board performance statistics weekly – making eQuest the Nielsen Ratings company of the HR industry. Other products include consulting, OFCCP compliance and audit protection, technology services, data analytics, Interactive media representation, SEO, and various predictive tools. eQuest was established in 1994. eQuest can be reached at [www.equest.com](http://www.equest.com).



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