Getting Smart About Your Workforce: Why Analytics Matter
## Contents

1. **I. Addressing Strategic Human Capital Challenges in Today's Environment** ................................................. 5

2. **II. Workforce Analytics – More Effectively Managing Human Capital Challenges** .......................................................... 9

3. **III. Driving a Strategic HR Organization** .................................................................................................................. 14

4. **IV. Barriers to Implementing a Successful Workforce Analytics Capability** ................................................................. 18

5. **V. Actions for Moving Forward** ................................................................................................................................. 20

   1. Define Workforce Challenges ................................................................................................................................. 21

   2. Identify Data Requirements and Ensure Consistency in Data Collection ......................................................... 21

   3. Define a Common Workforce Analytics Platform ................................................................................................. 22

   4. Make the Platform Easy to Use ............................................................................................................................... 22

   5. Enhance HR Analytic Capacity .............................................................................................................................. 23

6. **Conclusion** .......................................................................................................................................................... 23
Introduction

Employees continue to bear the brunt of the worst economic recession in a generation. In the United States, 2.55 million jobs have been lost since the recession started in December 2007, pushing the unemployment rate to a 16-year high, according to the Bureau of Labor Statistics. Most economists are projecting further job losses as the economy sheds more than a half-million jobs per month and adjusts to tighter credit markets and slowing consumer demand.

What’s lost in the blaring news headlines, however, is the way in which organizations, large and small, are making decisions about their talent during the current economic crisis. More often than not, companies have only a partial understanding of their current and future workforce needs. Many such organizations lack the insights that would enable them to identify high performers, ensure that the right employees are retained, and shift valued resources to other parts of the business in accordance with overall strategy. As a result, organizations are unable to seize opportunities that could further differentiate their value in the market.

To this end, we surveyed more than 400 North American human resources (HR) professionals on the use of workforce analytics and the challenges of applying analytics to organizational decision making. Particularly in these turbulent times, we believe the survey findings require reflection on the following themes:

- In today’s difficult economic environment, workforce analytics play an increasingly important role in addressing strategic human capital challenges.
- Workforce analytics are a key capability for HR organizations seeking a more proactive role in driving business strategy.
- The implementation of workforce analytics continues to be hindered by both technical and skill-related issues.
Our findings indicate that HR professionals, just like executives in finance and other corporate functions, need a consistent analytical point of reference to make human capital decisions that impact business results. Along with the necessary resources to transform data into insights, workforce analytics enable HR professionals to be more engaged in the formulation of corporate strategy. The result is better fact-based decision-making capability that is aligned with the long-term business imperatives of their organizations.

We hope you find this research informative and welcome a discussion of its results.
Today’s economic climate is forcing organizations to make difficult decisions about how best to maximize the productivity and effectiveness of various assets. Issues such as access to financial capital, buildings, equipment, technology, and employees are being placed on the table for discussion. Unfortunately, many organizations have not invested in defining, capturing, and analyzing workforce data to the same extent as in other critical business areas, such as procurement and finance.

Many of these functions have standard performance indicators that enable organizations to more effectively adjust their operations to business cycle fluctuations. HR professionals, however, have had a harder time defining their human capital requirements in a business performance context. And it is here, in this ambiguous epicenter of workforce decision making, that our white paper begins.

First and foremost, we discerned from our survey that HR professionals need analytic signposts from which they can connect human capital performance and strategy to wider business goals. For many organizations, these markers are absent. As a result, companies are finding themselves with a lack of insight around a number of areas that must be addressed in the current economic environment. These include:

- **Defining the requisite knowledge, skills, and capability requirements needed for the execution of business strategy.** Organizations must have a firm understanding of what skills and capabilities they have in-house, where gaps exist, and the best ways to fill those gaps through external hires or internal mobility.

- **Evaluating workforce performance.** In turbulent times, organizations need to differentiate high performers from low performers, compensate and reward these individuals accordingly, and identify opportunities to close performance gaps.

- **Retaining valuable talent.** Along with identifying top performers, organizations should have retention plans to keep these employees highly motivated and engaged. This helps ensure the continuity of operations and enable future growth.
• **Determining strategies for redeployment, retraining, and workforce reductions.** It goes without saying that tough times mean tough decisions. However, organizations can minimize the impact of layoffs and the subsequent loss of employees’ intellectual capital through reassignment, retraining, and reallocation of resources to higher-priority areas.

• **Understanding collaboration and knowledge sharing.** Now, more than ever, organizations must ensure that critical knowledge is retained, as downsizings and early retirement programs make it difficult to hold onto institutional memory.

• **Developing career paths and succession plans.** Formal career pathing and succession planning are vital to accelerating time-to-competency and minimizing productivity losses due to departures.

In this survey, respondents were asked to rate the importance of these and other human capital challenges as well as their organizations’ effectiveness at addressing each. *Figure 1* lists the nine human capital challenges that survey respondents were asked to rate and plots the importance and effectiveness scores assigned to each.

*Figure 1: Reported Importance and Effectiveness of Strategic Human Capital Challenges*

*Percentages responding ‘4’ and ‘5’ with ‘1’ being not important/not effective and ‘5’ being a very important/very effective*
Overall, we see a notable gap between the importance placed on these human capital issues and how effective organizations are at addressing them. Some of the largest reported gaps relate to issues that are at the heart of decision making during an economic downturn. These include:

- **Item I**—Developing succession plans and career paths (49 percent);
- **Item H**—Understanding collaboration and knowledge sharing (48 percent);
- **Item A**—Defining knowledge, skills, and capability requirements for the execution of business strategy (48 percent); and
- **Item F**—Evaluating workforce performance (46 percent).

Further, we see that the ability to retain talent (**Item E**) is ranked relatively high in terms of both importance (89 percent) and effectiveness (51 percent); however, there still remains a sizable gap (38 percent) between the two. Even more striking is the relatively low level of importance (57 percent) placed on strategies associated with reduction in force, redeployment, and retraining (**Item G**). Given the number of organizations that are, or will be, facing difficult decisions related to this topic, we would have expected firms to place a higher level of importance on it. Still, the relatively low level of effectiveness (29 percent) suggests that, as this topic rises in importance, organizations’ ability to address the issue will remain somewhat challenged.
From these results, we see that many organizations are struggling to address a host of strategic human capital issues. Further, these issues are being magnified in an economic maelstrom that is forcing companies to make hard choices about every aspect of their operations. Companies that are hampered by an inability to translate their current and future business models into knowledge, skills, and capabilities will find it difficult to make decisions about which resources they need to keep versus which can be more easily added when the economy recovers. Those without succession plans and career paths will find it difficult to reassign individuals and reorganize when there are fewer people to do the same or a greater amount of work. An inability to collaborate and share knowledge can result in critical knowledge being lost and productivity being hampered by a loss of social relationships. An inability to evaluate workforce performance may result in higher performers being swept up in downsizing efforts that don’t take into consideration the value these individuals generate for their organizations. In each of these areas, an organization’s ability to make well-informed decisions will play a key role in how it adjusts to the new economic realities of today’s marketplace.
II. Workforce Analytics — More Effectively Managing Human Capital Challenges

Despite the promise of greater efficiency and reduced departmental operational costs, the adoption of workforce analytic applications remains elusive. Only 33 percent of respondents indicated that they have such a solution in place. Among organizations that have implemented such applications, there was a 50:50 split between those using commercially available, packaged software and those relying on custom-built solutions.

According to the survey results, companies that have invested in analytics have the upper hand in addressing workforce challenges. In five human capital areas, we see a statistically significant difference in the level of effectiveness in addressing human capital challenges between organizations that employ workforce analytic applications and those that do not. As Figure 2 highlights, these gaps consist of:

- **Item D**—Developing training strategies (18 percent);
- **Item G**—Determining strategies for reduction in force, redeployment, and retraining (13 percent);
- **Item H**—Understanding collaboration and knowledge sharing (13 percent);
- **Item E**—Retaining valued talent within the organization (11 percent); and
- **Item F**—Evaluating workforce performance (11 percent).

![Figure 2: Level of Effectiveness in Addressing Human Capital Challenges](image)
Notwithstanding the apparent advantages that an analytics capability can provide, a number of organizations are still making important human capital decisions without workforce analytics. Thirty-seven percent of those surveyed are not using a workforce analytics solution for understanding collaboration and knowledge sharing (Item H). In Figure 3, nearly a third of respondents are determining strategies for reduction in force, redeployment, and retraining (Item G) without workforce analytics. And 28 percent indicated that they do not use workforce analytics for defining knowledge, skills, and capability requirements for the execution of business strategy (Item A) or for developing succession plans and career paths (Item I).

Figure 3: Percentage of Organizations Not Using Workforce Analytics to Address Specific Human Capital Issues
That said, many organizations indicated that they can obtain basic workforce data for specific human capital issues. As Figure 4 illustrates, there is a fairly consistent ability to garner basic human capital data, ranging from 39 percent for determining strategies for reductions in force, redeployment, and retraining (Item G) to 44 percent for developing succession plans and career paths (Item I).
However, while organizations are able to obtain basic workforce data, relatively few are applying more advanced analytic techniques in their decision-making processes. Figure 5 makes this clear. At most, only 36 percent of companies are using workforce analytics to identify historical trends and patterns (Item F), and 13 percent are developing future-based scenarios based on this data (Item B). In short, applying more advanced analytic techniques to understand the composition and capabilities of workforces is still very much in its infancy.
Overall, the implications are significant. Organizations are making fundamental decisions about their human capital—the resident knowledge, talent, skills, and intellectual property of their employees—without the benefit of processes and technologies that can provide a consistent method for collecting and analyzing data. This puts HR professionals at a distinct disadvantage in corporate boardrooms.

Understanding the often shifting requirements of human capital and its relationship to long-term business strategy is a senior executive conversation and one that should be couched in a rigorous, fact-based analysis of workforce performance. This could well prove to be challenging for most HR professionals, since only a small percentage are currently using more sophisticated analytics to assess human capital performance.
As organizations increasingly recognize the importance of workforce and talent management, the HR function itself needs to play a greater role in the development and execution of business strategy. While almost one-half of the more than 400 respondents said they are active participants in developing corporate strategy, only 17 percent indicated that HR is a proactive leader in the strategy process (Figure 6).

**Figure 6: HR's Involvement in Developing Corporate Strategy**
Overall, organizations that have analytics capabilities are not only more likely to use advanced analytics to generate better quality decisions, but are also operating in an environment where a wide range of stakeholders leverage analytics to make decisions.

We see from our survey that analytics play a critical role in enabling HR organizations to take a more proactive approach to corporate strategy. We found that organizations where HR is a “proactive leader in driving corporate strategy” are almost two times more likely to have a workforce analytics capability (Figure 7). Analytics enable HR professionals to analyze, interpret, and make the best possible decisions and recommendations based on workforce data. This ability to inform and optimize workforce decisions can enable HR professionals to develop business cases and assess tradeoffs in much the same way as their colleagues in other functional areas.

Figure 7: Current Plans for Developing and Deploying a Workforce Analytics Capability
Similarly, organizations, where HR makes a more proactive contribution to strategy, are more likely to apply advanced analytics to key human capital challenges (Figure 8). Advanced analytics capabilities allow organizations to identify historical trends and patterns and to develop scenarios and predict future outcomes, leading HR and its business partners to make better strategic decisions about key workforce challenges.

Figure 8: Proactive Organizations Are Using More Advanced Analytic Techniques
Survey data also shows that workforce analytics are primarily being used by executives and staff within the HR community. However, it is interesting to note that, in organizations where HR contributes more proactively to overall organizational strategy, both HR and non-HR staff are more likely to access and apply workforce analytics to their decision-making processes (Figure 9). Overall, organizations that have analytics capabilities are not only more likely to use advanced analytics to generate better quality decisions, but are also operating in an environment where a wide range of stakeholders leverage analytics to make decisions.

Figure 9: Stakeholder Groups Applying Workforce Analytics

* Percentages responding to ‘4’ and ‘5’ with ‘1’ being never and ‘5’ being frequently
Based on this data, workforce analytics play an important role in migrating HR from a more administrative to a more strategic discipline. Workforce analytics enable both HR organizations and the line executives who are the “owners” of various workforce segments to make more informed, fact-based decisions about the composition of their work forces and the performance of their employees. Without these insights, the HR function finds itself subject not only to further scrutiny, but also to criticism for failing to adhere to the decision-making standards practiced by other functional areas.

IV. Barriers to Implementing a Successful Workforce Analytics Capability

There was strong consensus among survey respondents regarding the important role analytics play in more effectively managing workforce performance and talent management. In Figure 10, 76 percent of respondents said that its greatest potential benefit was a better capacity to manage their workforce, while 69 percent cited improved levels of productivity. Sixty-seven percent, meanwhile, considered workforce analytics important in driving a better return on investment for talent management.

Figure 10: Potential Benefits of Workforce Analytics
Yet, despite the promise of greater efficiencies and returns, workforce analytics continue to be mired in both technical and skill-related issues associated with its implementation. We examined these issues across four areas: Data consistency, systems integration, information accessibility and analytic capabilities of end users. As Figure 11 illustrates, 58 percent of respondents reported having limited experience in analyzing data and developing insights. Fifty-seven percent had limited resources to integrate different human capital systems, while 56 percent reported that human capital metrics were not consistent across their organization.

Figure 11: Primary Barriers to Implementing A Successful Workforce Analytics Capability

- **Consistency**: 56%
- **Integration**: 53%
- **Accessibility**: 53%
- **Analytic Capability**: 58%

* Percentages responding to ‘4’ and ‘5’ with ‘1’ being “not a challenge” and ‘5’ being a “significant challenge”

Without data consistency and integration as a key part of an analytics deployment strategy, though, organizations will struggle to gain comprehensive insight into the performance of their workforce using an analytics solution. What’s required is an integrated approach that combines technology and skilled people to assess, deploy and implement a workforce analytics solution.
Based on our findings, we see three overarching themes:

1. In today’s difficult economic environment, workforce analytics play an increasingly important role in addressing strategic human capital challenges.

2. Workforce analytics enable HR organizations to take a more proactive role in driving business strategy.

3. The implementation of workforce analytics continues to be hindered by both technical and skill-related issues.

The survey data indicates that, of those organizations that do not currently have workforce analytics applications in place, 60 percent plan to develop and deploy such capabilities within the next one to five years. This is a testament to the perceived value of workforce analytics in helping HR manage and leverage employee data for decision support as well as analytics’ potential to provide strategic benefit to the enterprise.

For organizations looking to maximize their human capital investments and increase the strategic value of their HR functions through the use of workforce analytics, we have identified five important areas of focus:
1. Define Workforce Challenges

The first thing an organization must do is determine what workforce-related problems it needs to solve and how addressing those workforce challenges will impact organizational effectiveness. During this phase, organizations should ask questions such as:

- Does my organization have a sufficient number of individuals with the right skills to support a new product launch?

- What training interventions would be most useful to increase the productivity of my offshore contact center?

- Which recruiting channels are providing me with the most effective sales leaders after three years at the organization?

- What are the factors that differentiate higher-performing managers in my most productive branches?

- What percentage of my engineering workforce is eligible for retirement in the next three years, and what is the propensity of eligible engineers to actually retire?

Without clearly identifying problems that have a direct impact on business performance, organizations run the risk of investing time and energy in areas that are not a priority.

2. Identify Data Requirements and Ensure Consistency in Data Collection

Once an organization understands what key workforce-related challenges it needs to solve, it must identify the relevant data requirements and develop consistent methods for collecting that data across organizational units, geographies, and systems. For example, definitions of basic data items such as “Who is a full-time employee?” and “Where is the employee located?” can differ from system to system, making it extremely difficult to develop “apples to apples” comparisons. Without agreement around fundamental metrics definitions and standards, analysis will be inaccurate and lead to incorrect conclusions.
3. Define a Common Workforce Analytics Platform

Next, an organization should define a consistent workforce analytics platform for integrating and analyzing data from multiple sources. This platform should be able to integrate data from different HR, ERP, learning management, finance, and sales systems into a common data warehouse where both standard and custom queries can be conducted. Although some organizations have purchased best-of-breed point solutions, which highlight metrics within a specific human capital area, they do not provide a comprehensive picture of overall performance. This requires a single platform from which HR professionals and executive management can access and analyze data to make fact-based performance and strategic decisions.

4. Make the Platform Easy to Use

Once the organization has defined a place to bring the data together and perform the analysis, it needs to ensure that individuals both within and outside HR are able to conduct analyses and display results. For some user groups, packaged reports that rely on leading performance indicators and offer access to dynamic dashboards showing data about critical jobs may be sufficient, whereas other user groups may require the ability to drill down using trend analysis and cross tabs to segment data and diagnose underlying workforce issues. In many cases, organizations need both. What’s important, however, is that workforce analytics address the needs of multiple audiences and be intuitive so that non-technical stakeholders can harness its capabilities. This can be achieved through, for example, self-serve reporting or point-and-click report generation.

In addition, an easy-to-use platform should be capable of adapting to changing human capital and business requirements. This flexibility must allow the platform to scale and meet the future needs of the organization while minimizing the technical costs associated with reporting modifications.
5. Enhance HR Analytic Capacity

Lastly, organizations need to enhance the analytic capabilities of their HR professionals and line managers. Although training is one way of helping to develop analytic capability, it is not the only one. A broader strategy might include recruiting people into HR who have analytic backgrounds, rotating employees into HR from functions such as finance and customer service, incorporating analytics into professional goals and responsibilities, and providing a support system to make sure employees can ask questions and try out new practices in a safe environment.

With a strong analytic foundation, HR departments and their personnel can more effectively manage workforce data and establish greater business context for human capital decisions. This helps HR professionals not only justify their decisions using rigorous analysis, but also contribute more effectively to the creation of business strategy.

Conclusion

In today’s difficult economic climate, organizations must rely on a combination of experience and data to make decisions that will affect their performance for years to come. Unfortunately, at many companies, the ability to transform data about the workforce into meaningful insight has been neglected compared to other areas. From our study, we see that workforce analytics can play an important role in addressing many of the human capital challenges facing organizations today, as well as in enabling the HR function to play a larger role in influencing corporate strategy and direction.

While we recognize the barriers that companies must overcome to truly build an analytic capability, these obstacles are surmountable with the proper level of focus and investment. What will be less easy to fix are the human capital decisions that many organizations are making in the absence of fact-based analyses needed for effective decision making.
Further Information

To find out more about this study or to speak to an HCM leader, please send an e-mail to one of the contacts listed or to global.benchmarking@us.ibm.com, or visit ibm.com/bcs/humancapital. Contact Robert Rupar at 877-462-7905 or robert.rupar@us.ibm.com, Rishi Agarwal at 678-496-4521 or rishi.agarwal@us.ibm.com, or Eric Lesser at 617-693-6418 or elesser@us.ibm.com.

For information on Cognos Software and IBM Cognos 8 Workforce Performance, please contact us at 1-866-601-1934 or visit www.ibm.com/cognos/contactus. A Cognos Software representative will respond to your inquiry within two business days.

Survey Methodology and Demographics

Sponsored by Cognos Software in late 2008, this APQC and IBM’s Institute of Business Value survey targeted executive- and managerial-level professionals responsible for HR, human resources information technology, and human resources information systems at more than 400 organizations spanning a wide range of sizes and industries. The goal of the survey was to understand how workforce analytics is helping managers improve the quality of their business decisions and increase HR’s standing as a strategic business partner within organizations.

APQC’s award-winning four-phased benchmarking methodology was used to develop the key findings outlined in this white paper and companion presentation.
Appendix A - Study Demographics

The following charts provide an overview of survey respondents' demographics:
About IBM Cognos BI and Performance Management
IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

About IBM Human Capital Management
IBM is recognized as one of the world’s most respected companies with one of the most technologically savvy human resources organizations. We leverage our mature global delivery operations and extensive experience in human resources to offer innovative solutions that deliver value. And with more than 2,000 human capital management professionals in almost 40 countries, we can provide the right combination of skills, competencies, knowledge sharing and experience to help you meet—and exceed—your business objectives. On its way to achieving leadership in human capital management, IBM has invested heavily in research and thought leadership, including the IBM Institute for Business Value to perform business-oriented research on human capital topics and the IBM Research Division to apply technology to human capital—specific issues. With its deep understanding of recent major human capital issues, you can count on IBM to deliver the solutions of tomorrow—today.

About APQC
Founded in 1977, APQC is a member-based nonprofit serving approximately 500 organizations worldwide in all industries. An internationally recognized resource for process and performance improvement, APQC helps organizations adapt to rapidly changing environments, build new and better ways to work, and succeed in a competitive marketplace. APQC focuses on benchmarking and metrics, best practices, knowledge management, performance improvement, and professional development.