



What is happening with HCM Business Intelligence and Analytics Technologies' Adoption?

By Lexy Martin, CedarCrestone

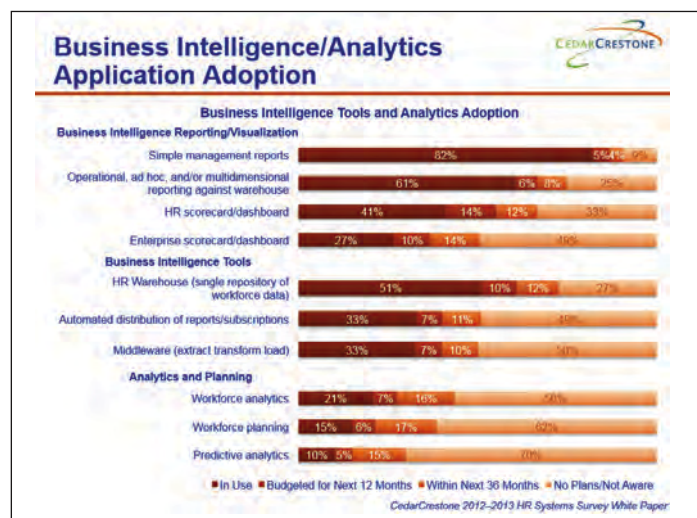
So many industry analysts report workforce analytics as one of the *big trends* in HR technologies these days. But the adoption numbers do not show great progress over the past 15 years. Is there actually quite a bit of adoption going on? Is the recognition of analytics as a significant trend due to the preparatory work going on at the conceptualization stage? Or, is the analytics technology adoption subsumed under the adoption of other technologies like the core human resources management systems (HRMS) or talent management solutions with embedded analytics functionality? Or, is the technology adoption everyone talks about actually happening elsewhere within the corporation, perhaps managed by the Information Technology (IT) department? At any rate, there appears to be a disconnect between the talk and the walk.

Dr. Jac Fitz-enz is credited with being “the source” for human capital strategy, measurement and analytics. He started working with workforce metrics in 1978 and founded the Saratoga Institute in 1980, later acquired by PricewaterhouseCoopers (PwC), still a leading source of consultants doing workforce measurement, benchmarking and predictive analytics, including some technology components. Dr. Jac and I first met outside our building’s communal restrooms in Saratoga, California in 1993. He was coming from one side of the building where Saratoga Institute had its office and I was coming from the other side of the building, where I worked at Co-development Technologies with a bunch of graphics, technology and management consulting people in developing employee self-service kiosks for companies such as National Semiconductor and Southern California Edison. Hallway conversations where Dr. Jac and I talked about our work led us to the conclusion that self-service kiosks were not a good platform for metrics and that metrics still needed to be reported on paper. Is that what’s wrong with the whole analytics movement – still reliant on paper and not using technology?

The annual CedarCrestone HR Systems Survey, now entering its 16th year,¹ began tracking adoption of reporting and analytics in the late 1990s. The first year we tracked, the adoption of the “management reporting application” – the early days of reporting metrics – was at the 15% adoption level. That simple level of reporting is now at the 82% adoption level, and higher in larger organizations with over 10,000 employees. A more sophisticated level of reporting of metrics – operational, ad hoc, and/or multidimensional reporting against warehouse – is at a 61% adoption level. In 2001, we added “workforce planning,” putting it into a category we

called strategic applications, noting 5% adoption. Several years later, in 2003, we added a whole category of applications, Measure/Plan Applications. We reported a major finding: *Performance measurement and analytics technologies are the next frontier*, saying, “the survey also includes workforce analytics and creates a new strategic application category of ‘measure talent,’ made up of two applications: workforce analytics and workforce planning. The combination of these two applications are in use in just 9% of North American respondent organizations, with 36% indicating that they plan to implement these applications during the coming 12 months. In large international organizations, 21% have these applications today and 48% plan to have these applications, clearly a bell weather of the interest in these two strategic applications.” These workforce performance measurement technologies were typified by balanced scorecards or manager dashboards to help organizations determine workforce trends. That was in 2003!

Fast-forward to our 15th HR Systems Survey, published in October 2012, when we report the workforce analytics/planning category of applications *at just a 15% overall adoption level!* That average now includes workforce analytics, workforce planning and predictive analytics. It’s that latter category that is very nascent at 10% adoption. But still, adoption of the workforce optimization technologies category of applications has really not gained great traction in the past 15 years. But, yet all our industry analysts say “analytics are a key area to watch.”

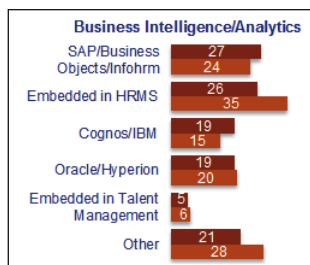


Perhaps some of the mystery is solved by reviewing the business intelligence reporting/visualization and business intelligence tools adoption numbers shown here. Growth has been good for business intelligence reporting/visualization and business intelligence tools, growing from an overall 43% adoption in 2011 to 47% adoption in 2012. Further, our three-year application adoption forecast shows this area to be the strongest future growth area of all. But, growth for analytics

and planning applications actually stalled between 2011 and 2012 among our survey respondents, due to the increase in respondents from the very small organizations (under 1,000 employees) that have not begun to adopt workforce analytics, workforce planning and predictive analytics. Adoption of workforce analytics is larger in organizations with over 10,000 employees – actually, double that in small organizations (31% vs. 15%) and higher adoption is the norm across this entire business intelligence/analytics category for larger organizations.

Progress in providing managers with direct access to business intelligence (BI) technologies also appears stalled overall (again, due to the increase in respondents from the very small organizations where BI use is negligible), remaining at 22% today as in 2011, with a forecast of 38% by 2013. Again, large organizations are further along with their work. By the same token, the delivery of multisourced data, such as financials or customer information, into dashboards or into solutions where managers can do their own analysis, declined from 15% to 12% in 2012 (not really statistically different, but still no growth).

So, is the big disconnect between what analysts say is being adopted and what has been adopted according to the CedarCrestone survey just part of what's being tracked? Let's look at adoption by vendor, and maybe here we will find one clue. In the chart below, which shows the percent of respondents with various BI/analytics solutions today (dark rust bar) and in 12 months (light rust), the SAP cluster of products slightly leads. But, the predominant approach for the future is *embedded analytics into the HRMS*. Enterprise-strength BI solutions from SAP, Oracle, or IBM will take a back seat to these tools from HR's perspective. In prior years, they appeared to be the predominant choice for the future.



I think that part of the mystery about BI/analytics adoption is solved by this trend towards embedded solutions owned by HR and in the solutions that HR is buying – a new HRMS or new talent management applications. Human

Resources wants to have control of these solutions and along with them comes analytics. They are often not happy with the IT group's support and IT itself would rather not own HR technologies either. But, I think adoption will escalate if HR and IT can work together to share BI tools and to bring together multisource data (financials, operational data, customer data, etc.) into an enterprise-wide solution. Long-term, workforce analytics and, for that matter, analytics for any other function within the organization, such as Marketing or Financial Analytics, should be available enterprise-wide.

Silo work with BI and analytics technologies should cease! As in 2011, the CedarCrestone survey reports that the lack of an integrated HRMS and talent management solution is expensive for delivering business intelligence. The average cost per employee for those with a BI solution set among those with integrated HRMS and talent management is US\$27 per

employee over all respondents. Those with a disparate set of talent management solutions, including a variety of best-of-breed talent management solutions, are spending US\$64 per employee – well over 100% more!

If we, in HRIT, want to see analytics work pushed to the forefront within our organizations, we have to work with IT (and, of course, vice versa)! But, we have to be the ones, I think, to reach out and make IT our friend and collaborator to improve adoption of human capital management business intelligence and analytics technologies.

Big Data

We define big data based on whether an organization is leveraging large-scale data collection, data mining, and pattern recognition applied to workforce data to meet business outcomes. Only 7% of respondent organizations are using big data today, more frequently in large organizations, and more frequently used or under evaluation in health care. Information technology respondents are significantly more familiar with the concept and technologies, and more often either responded “yes” or that they were evaluating than those in HR.

Why the low adoption? Among our open-ended responses, one respondent suggested, “Big data is not an HR thing, guys. We're really going to store tens of millions of rows monthly? You know better!” Another person from a sophisticated aviation manufacturer wrote, “Although we have ‘tons of gigabytes’ of data... we are very primitive.” Someone from a small organization wrapped it up by stating, “Big data seems to be the new buzzword, but I'm not sure how helpful it is for smaller organizations.”

CedarCrestone will continue to explore big data, but we do not expect it to become main stream for HR until 2015 at the earliest. What do you think?

Endnotes

1 CedarCrestone 2012-2013 HR Systems Survey: HR Technologies, Deployment Approaches, Value and Metrics, 15th annual edition, http://www.cedarcrestone.com/serv_annual_survey.php.

About the Author



As vice president of Research and Analytics at CedarCrestone, Lexy Martin is responsible for its annual HR Systems Survey, now in its 16th year. When not working on the survey, she works with organizations worldwide, providing HR systems strategy guidance. Projects begin with deep-dive benchmarking from survey results. In addition, she works with leading HCM vendors, advising on their value propositions and conducting surveys of their customer bases. She can be reached at alexia.martin@cedarcrestone.com.