

Executive Interview



A WSR interview with John Schwarz, co-founder and CEO of Visier, and information technology professional who has previously successfully led Business Objects, now part of SAP. During his tenure, Business Objects doubled its revenue to more than \$1.5 billion, improved profitability and executed seven strategic acquisitions. After SAP's acquisition of Business

Objects, he oversaw a dramatic continuing expansion of its business and was a member of the SAP Executive Board. Prior to Business Objects, John held senior executive positions at Symantec and IBM. He can be reached at john.schwarz@visier.com.

WSR: Big data is not just the focus of this issue of *Workforce Solutions Review*, but seems to be all over the technology news. What are your thoughts on some of the current challenges organizations face as they start down this path?

John: “Data” comes from everywhere. Stored information is growing at a 60 percent compounded annual rate. Organizations must deal continually with an increasing number of data sources. It used to be sufficient to only store payroll data. Now we have payroll, performance, skills and learning, succession, applicant tracking, safety records, employee surveys, social networks, even tests, pictures, e-mails and other unstructured sources. Some organizations even attempt to correlate employee information to business outcomes to measure productivity and predict future success.

Increasingly, companies are interested in social data, and are beginning to track both performance and behavior in real-time. But we are still in the early days of this journey. The interactions between these data sets generate some interesting secondary data as well – such as predicting resignations, or predicting applicant success. The difficulty is that there is no inherent structure to most of the diverse data, and the sources are usually incompatible.

The challenge most organizations face is not the volume of information, but the diversity, the lack of common identifiers, and the degree of inaccuracy that creeps in when using multiple system sources.

Worse, the tools that are available to manage the so called big data are extremely immature, and require a high degree of technical proficiency.

WSR: Analyzing and interpreting all this information requires normalization and integration. How do we bring both structure and meaning to the data?

John: Computers and sensors produce data, but humans consume it. So data must relate to something, be it the employee (job, skills, compensation, terms, performance, location, etc.), the customer (contracts, terms,

relationships, service or product consumed) or some other framework.

To date, the big data vendors have focused on solving data storage and retrieval challenges. They have yet to create useful tools that allow business people to ask questions and receive answers without the employment of extremely skilled “data scientists.”

Managers, HR and employees need an environment where they can be led through a series of best-practices management metrics, pose questions and observe the answers provided, and then ask subsequent questions based on initial discoveries. They need an environment that serves them with alerts to out-of-bounds situations. They need to identify the core influencing parameters that impact future business outcomes and must be able to iterate planning scenarios to develop the optimal resource plans.

I believe that the right answer lies in producing domain specific analytics and planning applications that provide the answers for the business user out of the box. No customizing services should be required.

WSR: As you point out, humans (organizational leaders included) don't always know what they want until they see it. How can we get beyond “canned” reports and get more predictive with analytics?

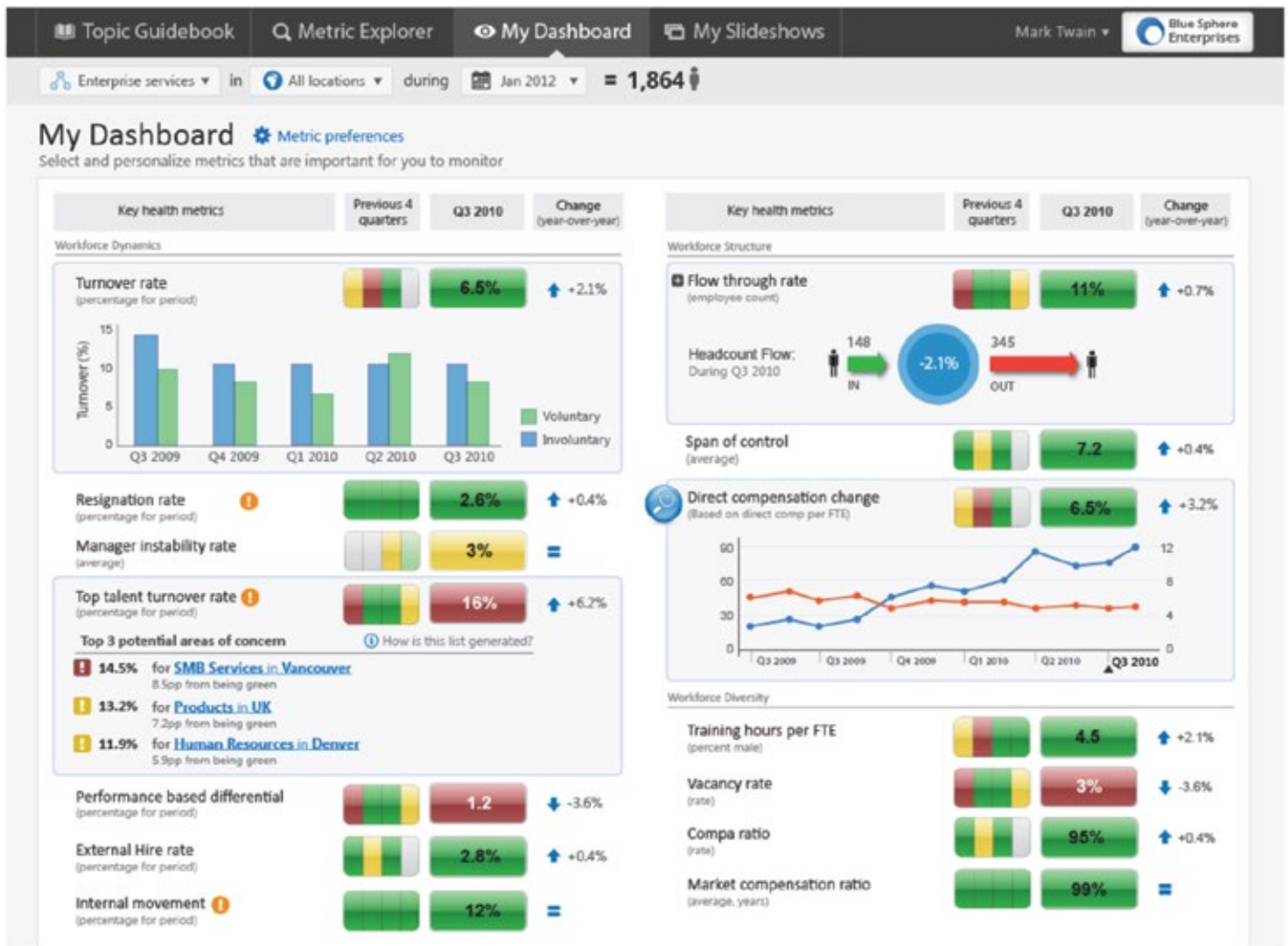
John: People can usually anticipate their initial questions; for each industry and role, there are prescribed best practices, approaches and metrics that provide a starting point for further discovery. The key is to design the application so that the user can go anywhere they need from the initial insight, guided by their sense of discovery, or by a prescribed workflow. It is also essential that the application allows for an easy method of sharing the discovery with others that need to know.

Here's an example that illustrates the need to think about data causally:

A company is located in a community with a highly diverse minority population. Trying to reflect the community in which they operate, they are focused on hiring minorities. But while they constantly hire minorities, their overall minority representation does not improve. In response, they make increasing investments to make new hires feel welcome.

In reality, the majority of the organization's departments have been successful in retaining and promoting their minority members. But this fact was hidden in the average calculations that were skewed by a small number of departments that were dramatically failing in their retention objectives.

Modern, big data-capable, domain-aware solutions such as Visier automatically surface outliers in any calculation



of averages so that any deeply hidden issues are shown alongside of the average. The averages are simultaneously compared to benchmarks and past performance, and outliers are ranked based on parameters contributing to good or bad performance. This allows the user to drill down and look for common characteristics and causes of problems while also underscoring good practices that can be promoted across the organization.

WSR: What does the future hold for big data analytics?

John: Currently, for users to get value out of their data, they must take a series of long, complex, technically challenging, risk prone and expensive steps using business intelligence and big data tools.

Big data analytics will reach its potential only when the industry delivers analytic applications that hide all the steps between the raw source data and the usable insights. A business person should not be expected to learn the data organization schema and extraction tools. Nor should they have to hire expensive and hard to find data scientists who have the technical knowledge to do this. A lot is lost in translation and lead-time between the business users’

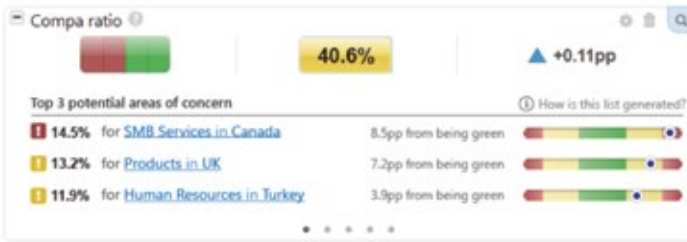
questions and the data scientists’ work.

The future is in domain-specific analytics that aggregate questions people want to ask (by industry, domain, process, country, etc.), built on best practices gleaned from the experts, and deliver visualizations designed to address a particular question – in a way that is already familiar to the person asking it.

Consider the example of succession planning: HR can identify competencies required to be a successor for a certain job. If HR can identify, based on the history of successful incumbents, the most important skillsets and characteristics, then they can easily identify people who have those same skills and characteristics, or point out in a succession planning scenario what skills people need to acquire to succeed.

WSR: Large amounts of data are not easy to digest. Data aggregation and display are emerging areas attempting to address this. Can you share with us some of what you’ve learned regarding how to represent (and simplify) data so data consumers can glean insights at a glance?

John: The best example for illustration is the car



dashboard. While we drive, we get constant data flow from the dashboard about speed or remaining fuel. But the real critical information — such as engine overheating, low tire pressure, or break line failure — is delivered through warning lights.

Alerts are also particularly well-suited for the mobile platform. Google Glass technology could become a very interesting way to look at information superimposed on the reality around us. For example, in the hiring process, a recruiter could glean graphic, contextual information about a candidate while reviewing a résumé.

The core challenge is how to connect the dots between seemingly unrelated data points or events, and how to bring attention to important discoveries. The right solution will not ask the user to look at tabular or even graphic output. It will serve up insights based on the understanding of the context in which the user works. It will identify outliers and out-of-bounds alerts. It will advise the user on an optimal course of future action. Such discoveries do not require a massive amount of data to be displayed.

This will be a rich area of exploration and innovation.

WSR: What questions should HR practitioners ask to help make meaningful big data a reality in their organizations?

John: I would use the following questions as a starting point for embarking on any analytics project, with or without big data:

- Do you know the key metrics or questions you need to answer? Are there best practices in your industry that you could follow?

- Do you only want to look at history, or also project and plan the future?
- What sources of data would be best to inject into your workforce analytics? Business outcomes? Performance tracking? Health outcomes? External benchmarks? Skills inventory? Compensation history? Organizational hierarchies?
- How much detail tracking do you intend to do? Granularity of skillsets? Frequency of updates and of plans? How much history do you keep?
- How related do your data sets need to be? How many organizational hierarchies do you need to maintain? Who should have access to the information?
- Do you have the need, the skills and capacity to build the analytic application in-house or would you be better off acquiring the best-of-breed cloud-based solution?

The key is to not try to collect all the data there is or that might one day become useful — that task is overwhelming. Start by only collecting the data you need to answer the questions you know you will have. If the data schema is architected in a flexible way, it should be easily amendable as new requirements or new data surface.



This interview was conducted by David Gabriel, WSR associate editor. For the past 20 years, Gabriel has dedicated his career to helping leaders, teams and organizations maximize their potential, create value and drive sustainable results. He's delivered innovative programs and consulting in talent management, leadership and organization development for an array of clients — from startup to Fortune 100. A partner with Global Reach Leadership, he specializes in executive coaching, talent management and organizational collaboration. He can be reached at david@globalreachleadership.com.