



# Harnessing the Power of Big Data to Improve Business Execution

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From emails and videos to credit card transactions and CT scans, every day, trillions of bytes of data are captured by everything from smartphones to sensors to satellites. Each year, the amount of data being captured increases by a staggering 40 percent.<sup>1</sup> These huge data sets — sometimes called “big data” — present enterprises with significant new opportunities to improve business execution.

Forward-thinking companies around the globe are discovering that analytics can transform big data into valuable information to better track resources, increase predictive capabilities, and inform business strategy. But did you know that big data can also be derived from your HR technology — and that this HR-rich data directly affects every aspect of your business?

## HOW BIG IS BIG DATA?

The total amount of data created and replicated in 2009 was 800 exabytes — enough to fill a stack of DVDs reaching to the moon and back.

SOURCE: MCKINSEY GLOBAL INSTITUTE. BIG DATA: THE NEXT FRONTIER FOR INNOVATION, COMPETITION, AND PRODUCTIVITY. MAY 2011.

It's true. Integrating data from your enterprise applications with data on your most valuable resource — your people — allows you to tap into business-transforming analytics that improve insight and enhance overall performance. So it's perhaps no surprise that experts believe that any effective enterprise data strategy must include integrated and interoperable data models.<sup>2</sup>

Too often that isn't the case. Most human resources information systems (HRIS) are siloed, limiting views of talent and resources, and making it difficult to form strategies for meeting immediate and future business needs. Saddled with legacy systems, IT teams struggle to integrate and analyze massive amounts of data.<sup>3</sup> They also struggle to find a solution that will do these things in a way that is scalable and flexible.

The reality is that today, integrating people and business data from other enterprise applications is no longer a luxury — it's a requirement. If you understand how to seamlessly bring this data together, then analyze it with speed and accuracy, you can not only improve execution but also control costs, conserve resources, improve strategy, and increase competitive advantage. As an SAP company, SuccessFactors is uniquely suited to provide you with the expertise and technology that bring together the data you need quickly and easily — and gain insights on demand.

<sup>1</sup> McKinsey Global Institute. Big Data: The Next Frontier for Innovation, Competition, and Productivity. May 2011.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

## The Business Impact of People

Your workforce — from how your people are trained and how they perform to how happy they are in their jobs — impacts every aspect of your business. However, many organizations do not understand that the data that you can glean from your workforce goes far beyond tactical HR issues, such as recruitment and retention. As a result, HR technology and data are siloed in many organizations.

When properly analyzed, people data can and should be used to inform decision making, drive performance measures, and increase competitive advantage. Yet complete visibility not only requires integration to other applications, it also calls for advanced analytical skills — a resource most companies simply do not have. The United States alone faces a shortage of nearly 200,000 workers with deep analytical skills and an even greater shortage (1.5 million) of managers and analysts who can analyze data and make decisions based on their findings.<sup>4</sup>

In the future, organizations must have the ability to bring together all of this data quickly and easily, and to gain insights on demand.

## WHAT'S THE VALUE OF DATA-DRIVEN DECISION MAKING?

Research from the Massachusetts Institute of Technology's Sloan School of Management found that large companies that adopted "data-driven decision making" achieved productivity gains that were 5 to 6 percent higher than other factors could explain."

SOURCE: LOHR, STEVE. THE NEW YORK TIMES. THE AGE OF BIG DATA. FEB. 11, 2012.

## Unleashing the Power of People Data

The need for deep analysis cannot be overstated. When used in conjunction with other enterprise data, people data has virtually unlimited potential to improve business outcomes. Connecting your people data with information from other enterprise systems can improve business execution and accelerate real results.

When you link sophisticated analytics with a single source of reliable data, you can:

- Minimize risks by better preparing for change, such as a merger or major downsizing, by modeling potential risks and how the organization would handle them.
- Achieve growth and expand into new markets by ensuring that the right mix of employees, positions, and capabilities is in place.
- Gain valuable business insight into trends, customer demands, resource usage, and much more.
- Substantially improve decision making by operating with more insight, increasing productivity, and cutting costs.

<sup>4</sup> McKinsey Global Institute. Big Data: The Next Frontier for Innovation, Competition, and Productivity. May 2011.

Analytics lead to insight and improved business execution. A Harvard Business Review study found that **most business strategies deliver only 63 percent of their potential financial performance**. One of the biggest **culprits for poor performance was inadequate or unavailable resources**.<sup>5</sup> Getting the data you need today sets the stage before better execution tomorrow.

## Using Data to Improve Business Execution

With so much business transformation made possible through the use of analytics, the days of siloed legacy HR systems are numbered. Instead, successful companies are using today's advanced HR technology to drive business execution. HR-rich data can help you:

- **Enhance productivity and performance.** Linking employee data to areas like finance, CRM, and compliance can help you determine which teams and functions are the most productive and which ones need improvement. Analyzing variability in performance can help you understand root causes and manage performance to higher levels.

For example, cable provider Comcast found that high turnover rates among customer service representatives (CSRs) were having a negative impact on overall customer satisfaction. They implemented a program to improve the retention of experienced CSRs and increased customer satisfaction scores by 10 percent in only one year.<sup>6</sup>

Comparing your organization's productivity against industry benchmarks can also lift performance standards within your organization. Likewise, understanding the effectiveness of training programs can also have a positive effect on job performance and competency across all areas of the business.

You can also use people data to identify your highest-performing employees, employees who have the most potential, and those performing key roles that are hardest to fill — and could potentially cause the biggest disruptions if vacated unexpectedly.

- **Increase profitability.** Integrating people data with other business-critical areas — such as marketing, finance, and CRM — allows you to identify and prepare for market shifts and rapid change. For instance, POS data can reveal customer buying trends and inventory levels, and even reveal weaknesses in your supply chain. In the same way, people data can uncover gaps in skills sets that you need in order to market and cross-sell products differently, driving you to alter training programs accordingly.

People data can also reveal the costs of hiring and training new employees, your retention rates, and the bottom-line impact of employee sick days, as well as how sick days impact the cost of benefits — something every business struggles to control.

In retail, a knowledgeable salesperson can spell the difference between making a sale or not. At Luxottica Retail, which operates optical stores globally, online training makes it easier to deliver training to 38,000 employees in 6,200 stores. Employees can spend less time in the classroom and more time with customers, even as they get valuable training.<sup>7</sup> Equipped with on-demand sales data, training employees about hot-selling products and sales techniques is easier than ever.

<sup>5</sup> Mankins, Michael C. and Steele, Richard. Turning Great Strategy Into Great Performance. Harvard Business Review. July-August 2005.

<sup>6</sup> SuccessFactors Case Study: Comcast. <http://www.youtube.com/watch?v=9I5z6-5cle4>

<sup>7</sup> SuccessFactors Case Study: Luxottica Retail. <http://www.successfactors.com/resources/download/luxottica-retail-case-study/>

- **Strengthen competitive advantage.** In a world where specialized skills are often in high demand, recruiting and training are expensive, and retention is a must, expertise and specialization can be invaluable in helping you improve quality and create a competitive niche.

## DATA CAN SHED LIGHT ON DANGEROUS ASSUMPTIONS

It's hardly a secret that demand for nurses keeps increasing in the healthcare industry. However, in the case of Aetna, the company assumed the shortfall in hiring was because of staff retirements. Segment analyses told a different story. After close examination, they found that first-year turnover was high, which disproportionately constrained internal resources at a time when the external labor pool was also shrinking. As a result, Aetna was able to develop a target programs to improve first-year retention.

SOURCE: SUCCESSFACTORS CASE STUDY: AETNA.  
[HTTP://WWW.SUCCESSFACTORS.COM/RESOURCES/DOWNLOAD/AETNA-SUCCESS-STORY/](http://www.successfactors.com/resources/download/aetna-success-story/)

That expertise often comes from on-the-job training, a significant investment in both corporate time and money. But according to Bersin & Associates, only 18 percent of workforce training programs raise skills from deficient to adequate.<sup>8</sup> Do you know how well your training programs are working? Tracking sales figures and linking that to your recruiting, training, and retention data can give you answers that lead to action.

People data can also help you be more nimble in the marketplace. For instance, the merger of a competitor could accelerate the need to deliver new products and services, expand into a new market, or ramp up production — all of which requires specialized management expertise. Analyzing existing skills sets allows you to adjust hiring and training programs to account for changing business needs.

- **Reduce risk.** A volatile economic climate often leads to rapid change and increased risk to the business. Linking finance, compliance, and people data can prepare you for the unexpected. Bringing the data together can mitigate turnover among critical roles and top performers, and reduce risk in other ways.

For example, what happens if you suddenly lose a key employee? Do you have a succession plan? In the event of a sudden merger, would you have the right managerial skills in place to effectively manage teams through the transition? Understanding skills gaps and key roles makes it easier to align your workforce with your business goals.

Ergon Energy, a government-owned utility in Australia, had multiple levels of risk to navigate. Not only did it face significant skills shortages for technical talent because of an aging workforce, it also needed to prepare for a different regulatory environment that included retail competition. Connecting all of its strategic data allowed Ergon to model different growth scenarios and even forecast changes in supply and demand. As a result, the company was able to develop a 10-year plan to manage a rapidly changing environment.

<sup>8</sup> Bersin, Josh. Big Trends in Talent, HR Measurement and BigData: The Convergence of HR Measurement and BigData Is Here  
Bersin & Associates. 2012. To purchase the report, visit <http://www.bersin.com/Practice/Detail.aspx?id=15356>

<sup>9</sup> SuccessFactors Case Study: Ergon Energy. <http://www.successfactors.com/resources/download/ergon-energy-success-story/>

- **Pave the way for innovation.** As customer demands evolve, so must your products and services. Do you have the talent in place to fuel needed research and development?

You can quickly determine this by following buying trends derived from your CRM, ERP, POS, supply chain, and financial systems, then combining that information with your people data.

For a large global manufacturer like Nissan, having the right people in the right positions is a challenge that transcends borders and time zones. Nissan needed sophisticated tools to track employees in a database that allows for portability of talent — between different divisions within the company and around the world. By integrating consistent talent processes with business technology, Nissan has streamlined processes and increased the time it spends on strategy and innovation from 20 percent to 80 percent.<sup>10</sup>

Whether your goals are increased performance, reduced risk, or a better competitive foothold, solutions such as Workforce Analytics and Workforce Planning are specifically designed to help you take control of business execution. Answering key questions about workforce challenges can change your business. You can identify talent gaps, and then proactively take measures to decrease your exposure in areas such as recruiting and succession planning. What's more, SuccessFactors is positioned to help you achieve these results with speed and accuracy.

## The Need for Speed

The biggest problem with big data is that it is, well, big. Even though analyzing data of this magnitude has become possible, that **doesn't necessarily mean it is fast**. Depending on the complexity of the data set, it could take days. Getting to the right information at the moment you need it is one of the biggest challenges that business leaders face today.

Imagine you are a retailer. What if you could do cost and profitability analyses across millions of records spanning three years, hundreds of thousands of employees, and thousands of locations in fewer than 5 seconds — that is, in real time — instead of in a few days? How would that change the ways you engage with employees and managers? Fast, accurate analysis can help you take performance measurement and execution to entirely new levels.<sup>11</sup>

That kind of speed is now possible. HANA, an analytic appliance from SAP that stores data in memory (rather than on disk) enables near-real-time analytics, reducing processing speeds from 60,000 milliseconds to 17 milliseconds, an increase of 1,000 times (or faster).

As operational data is created, it is integrated with historical transaction and analytic data. HANA can process both structured and unstructured data, including social networking and machine-generated data, so enterprises can analyze data sets that are larger — up to hundreds of terabytes — than what can be analyzed with traditional data warehousing technology.<sup>12</sup>

## NOW IS THE TIME TO ACT

You have big data, but what are you going to do about it? Leaders of organizations need to recognize the potential opportunity as well as the strategic threats that big data represents, and should assess and then close any gaps between their current IT capabilities and their data strategy and what is necessary to capture big data opportunities relevant to their enterprise.

SOURCE: MCKINSEY GLOBAL INSTITUTE. BIG DATA: THE NEXT FRONTIER FOR INNOVATION, COMPETITION, AND PRODUCTIVITY. SEPTEMBER 2011.

<sup>12</sup> Kelly, Jeff. Speed the Key to SAP HANA's "Fast Data" Approach to Analytics. SiliconANGLE. May 25, 2012. <http://siliconangle.com/blog/2011/05/25/speed-the-key-to-sap-hana%E2%80%99s-%E2%80%9Cfast-data%E2%80%9D-approach-to-analytics/>

As part of SuccessFactors Workforce Analytics and Workforce Planning solutions, HANA accelerates speed to information. But that speed isn't just about processing power. HANA is replete with robust reporting and talent analytics features, including:

- **Embedded, real-time dashboards** that are configurable and optimized for the iPad, making reports easier to access, even while on the go.
- **An online report designer** that allows users to build custom queries, reports, pivot tables, and pivot charts on the entire data set from BizX apps. You can schedule automatic report distribution and send personalized reports to thousands of users.
- **Access to industry benchmarks**, so you can compare talent metrics with companies of similar sizes, industries, regions, etc.
- **More than 2,000 prepackaged, best-practice** talent metrics, trends, dashboards, and reports to give HR managers, HR practitioners, and business managers a head start on talent performance insight.

Armed with the ability to make better business decisions in real time, business leaders are finding that big data doesn't have to be big — or slow.

## Conclusion

To improve business outcomes, your data should inform every strategic business decision, which is why companies that are unprepared to integrate and analyze data across their enterprise will be left behind.

Successful companies today are advancing their business by fully integrating HR technology with other essential enterprise applications. SuccessFactors can help you do just that. With solutions designed to integrate seamlessly with your enterprise applications, we can help you leverage sophisticated analytics to improve business execution.

Our cloud-based solutions free IT to spend less time worrying about managing and maintaining technology, and more time focusing on strategic initiatives that drive growth, productivity, and innovation. Fast to deploy and easy to maintain, solutions like Workforce Planning and Workforce Analytics — infused with real-time knowledge made possible by HANA — are designed to adapt to your existing IT infrastructure, to flexibly scale as your needs change, and to configure to virtually any enterprise application while keeping sensitive data secure. Perhaps best of all, because our solutions are available as SaaS (Software-as-a-Service), management costs are predictable — and lower.

Are you prepared to make the most of your data? With more than 3,500 customers and 15 million end users, SuccessFactors is ready to help. And as an SAP company, customers have the assurance of knowing that we are better positioned than any provider to deliver a solution that is flexible, scalable, and secure in the cloud. We have helped customers around the globe harness the power of people data to drive business execution. Let's get started today.

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