SAPinsider
This article appeared in the Apr ▪ May ▪ Jun 2013 issue of *SAPinsider* (http://sapinsider.wispubs.com) and appears here with permission from the publisher, WIS Publishing.
WIS pubs

Destiny Is No Longer in the **Hands of Fate**

Take Your Organization's Big Data from Data to Decision

by Mimi Spier and Isabelle Nuage, SAP

Mimi Spier (mimi.spier@sap.com) has spent the last 18 years strategizing, building, and implementing software applications for enterprises like Oracle, Business Objects, Hyperion, and SAP. As Senior Director of Solution Marketing at SAP, Mimi is responsible for the mobile analytics and cross-portfolio strategy and go-to-market activities.

Isabelle Nuage (isabelle.nuage@sap.com) has 17 years of industry experience in business intelligence and analytics. She is responsible for the analytics portfolio and predictive analytics solution marketing and is the analytics content strategy lead for major events such as SAPPHIRE NOW and the ASUG SAP BusinessObjects User Conference.

Although an exponential increase in the volume, velocity, and variety of data in the world makes data management and analysis an overwhelming task for many organizations, it is also one of the most significant business opportunities in the 21st century. Every time we turn on our iPhones, tweet our opinion, or communicate via Facebook, we are creating data that is incredibly rich with valuable information. And this information is available for organizations to leverage to improve their business.

However, companies need the right technology to capture this data — which is stored everywhere from desktop spreadsheets to the cloud — derive meaning from it, and distribute the dynamic and intelligent information in real time throughout the organization to the right person, at the right time. Companies that can do this are harnessing the opportunity that trends like mobility, cloud, and social media offer. That ability, together with unique technology innovation, will ultimately help them secure a competitive edge.

Missing the Signals

Though the opportunity is right in front of them, organizations are often still focused on historical information and not on what's happening now and what's coming next. Or, they are not using information *at all* to make decisions. According to Gartner, only 10% of employees today have access to analytics. As a result, organizations are missing critical signals hidden in social media and other types of information that, once analyzed, provide predictive insights that could truly drive transformational change.

What if you could give people the information they need at the moment of decision making — full knowledge of the current and future opportunities and risks of their decisions — in a way that is visually intuitive for them to make the best decision?

Gartner forecasts that 50% of all employees will need access to analytics by 2014, and that 75% will need it by 2020.[1] Providing access for all of these people will require a fundamental shift in business strategy.

Turning Signals into Business Value

When thinking about how information can help drive business value, organizations must consider all aspects of the business, from optimizing operations and empowering all employees, to taking the right amount of risk and better engaging with consumers.

The technology that is fundamental to driving this value is the combination of a real-time data platform, predictive analytics and business intelligence (BI), and mobility. The opportunities to transform signals into real-time business value and create a new culture for everyone to make the best, most-intelligent decisions are endless.

Consider the following examples, which show how companies can leverage signals to change the game for their business:

Brand sentiment: By capturing and analyzing customer comments on Facebook, Twitter, and LinkedIn, you can improve customer experience and optimize the performance of a marketing campaign.

[1] Gartner, "Market Trends: Analytics, Business Intelligence and Performance Management to be All-Pervasive by 2020" by Don Sommer and Rita L. Sallam (June 29, 2012).

Predictive maintenance: By analyzing a continuous stream of machine data diagnostics, you can predict when the performance of machinery is degrading or about to break down.

Insider threats: You can identify suspicious behavior and pinpoint potentially high-risk employees by looking for anomalies hidden in data about user behavior.

Network optimization: Understanding usage patterns and predicting customer trends is essential to optimize your communications network.

Propensity to churn: If your business suffers from customer turnover in a highly competitive market, you can determine a customer's "propensity to churn" — the likelihood he or she will leave you as a customer — by analyzing, for example, customer sentiment, buying patterns, and demographics. Using this information, you can offer new services or deals to help retain them.

Product recommendations: By analyzing customer purchasing histories and online browsing patterns, you can build a profile of customer interests and make targeted product upsell recommendations.

Fraud detection: You can identify purchases or insurance claims that have a high probability of being fraudulent by analyzing transactional information and electronic documents.

Real-time risk mitigation: By analyzing financial transactions in real time, you can identify high-risk investments, sales, and deals before they actually occur.

360-degree customer view: By storing and analyzing all of a customer's data, such as transactions, browsing history, and social media activity, you can build a complete view of your customer across all channels, which will enable you to better serve that unique customer.

Asset tracking: Track high-value assets and identify abnormal behavior that may put assets at risk of loss, or identify inefficient usage that is costing your business money.

Personalized care: Use advanced analytics to create personalized treatments for patients. For example, Mitsui Knowledge Industry offers personalized cancer treatments based on genome analysis.

Real-time demand/supply forecast: If your business is seasonal or varies greatly in different local markets, you can better forecast customer demand and optimize inventory by analyzing local market trends and weather patterns.

Gaining Predictive Insight

Using BI tools and looking at hidden signals found in data can help a company reactively address customer needs and trends. While being reactive is important, your business can gain more value by acting proactively. Predictive analytics allow you to predict trends and gain deeper business insight *before* you release products or services, giving you a huge competitive advantage.

With predictive analytics, organizations can design advanced predictive models and visualize data from internal and external sources. By combining a real-time data platform and the right experience, a company can adapt to hidden signals mined from massive volumes of data to better identify opportunities and respond faster to unforeseen risks. (See the sidebar on the next page to learn how one customer has successfully used predictive analytics.)

A Personalized Path: Data to Decisions

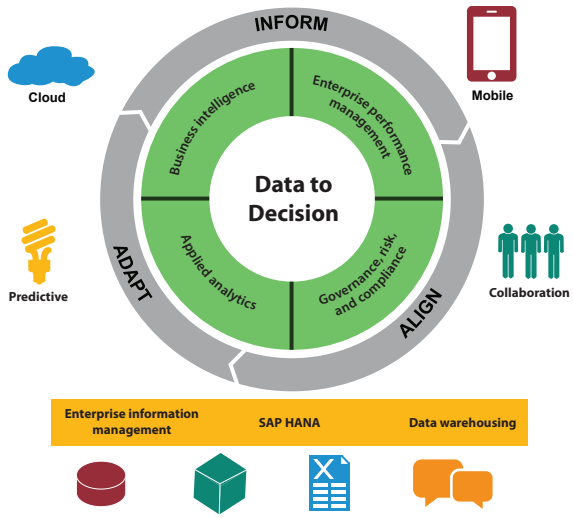
The numerous benefits of predictive analytics and BI tools are easy to see, but many companies don't know where to start. SAP HANA Insights, a Data to Decision package from SAP, allows you to instantly capture, store, analyze, predict, report, and visualize massive amounts of information streams (see **Figure 1** on the next page). The data can come from anywhere and

Predictive analytics can help an organization:

- Inform decision makers and plan for the unexpected
- Align plans with predictable outcomes and identify hidden opportunities
- Adapt strategies in real time and gain a competitive edge

Subscribe today. Visit sapinsider.wispubs.com.

FIGURE 1 ▶ Data to Decision packages enable you to transform your business with technology innovation



CIR food Uses Predictive Analytics to Improve Restaurant Operations and Customer Experience

Based in Reggio Emilia, Italy, CIR food is a food service and restaurant business and it provides catering services to schools, hospitals and healthcare facilities, businesses, and military communities. They are a mid-size company with a global reach. With over 1,200 facilities managed and thousands of employees, including dieticians and nutritionists who develop healthy menus, dishes, and culinary methods, they strive to satisfy all types of consumer needs. Outside of Italy, CIR food is present in Belgium, Bulgaria, Vietnam, and the US.

CIR food has been using business intelligence (BI) to analyze their business, but they didn't stop at just providing real-time information to their executives and restaurant managers. They saw the value and need to predict, more accurately, the fluctuation of demand and the habits of customers to optimize restaurant operations and employee allocation on different tasks. For this reason, they chose predictive analytics from SAP, which will allow them to reach these targets in a simple and integrated way. They expect the combination of predictive analysis tools and SAP HANA will improve the decision process and will allow them to better serve their clients. Predictive analytics helps CIR food in several areas to improve their business functions:

- Performing demand forecasts and predicting restaurant attendance fluctuations
- Optimizing food purchases to reduce waste (approximately 30% of turnover)
- Human resource planning in allocating employees to the right restaurants and food service functions

CIR food is a good example of how companies are using BI and the next generation of BI and data warehouse technology to positively affect their business outcomes. They are doing this not only to improve their top line results, but removing reliance on IT, which will increase the bottom line.

the results are personalized to your needs so you can make the best possible decisions every time and ultimately drive transformational results faster. Data to Decision packages combine our most innovative real-time data platform, predictive analytics, and mobile BI to help you solve your most critical industry or line-of-business challenges faster and deliver compelling real-time experiences to customers. Learn more at **www.sap.com/datatodecisions** and **www.sap.com/predictive**. ■

Subscribe today. Visit sapinsider.wispubs.com.