Business Analytics – How to Bridge the Gap Between Knowledge and Results
INTRODUCTION

Business analytics and its potential value to organizations have been a frequent topic of discussion across industries over the past 24 months. Organizations have spent the last several years installing and stabilizing Enterprise Resource Planning (ERP) systems, data warehouses, and Business Intelligence (BI) tools in an effort to more accurately capture operational data and use it to predict future business performance. The age of social media has spawned a whole new focus on “unstructured data” and how to analyze such information, while advances in digital and mobile technology have allowed us to collect data for almost anything. As a result, companies are finding themselves awash in data—about their employees’ skills sets and experiences, customers’ preferences and habits, supply chain throughput and costs, and industry and market trends, etc. With this availability of data has come the obvious question—what should we do with all this information and how do we use it to our advantage?

ScottMadden believes that business analytics is here to stay. Organizations have come to realize that tools exist to make fact-based decisions with less reliance on “gut” instincts. Predictive analytic techniques combined with real-time data updates enable dynamic decision-making, and companies have accepted that this has real value. However, inherent struggles remain from bridging the gap between where most organizations are today to the efficient world of tomorrow where such business analytics are in place. Organizations have bought into the concept, but many are still unsure how to “make it happen” for them.

While the topic of business analytics has been around for several years, only a few companies have been able to take advantage of analytics and see its benefits. This lack of adoption is indicative of the level of effort required to achieve the benefits and of the fact that this space is still in its infancy. Companies are becoming aware of the data available to them, but have yet to turn the corner in determining how to proactively use it to manage their business. To reach the desired end state often requires investment in expensive technologies, a focus on data integration of current information, and active recruiting and development of specialized knowledge and skills in the employee base.

DEFINING ANALYTICS

One indicator that analytics is still in its infancy is the sheer number of words that are used to try and define what the term “analytics” means. As Figure 1 shows, companies and pundits alike are still trying to find the appropriate words to represent their perspective on the term “analytics.”
SAS, a leader in BI and predictive analysis tools, previously defined analytics as “a wide range of techniques and processes for collecting, classifying, and interpreting data to reveal patterns, forecasts, anomalies, key variables, and relationships. The goal is to derive new insights that drive better decisions and more effective operational processes.”

More simply put, ScottMadden believes analytics defines the process by which we attempt to bridge the gap between knowledge (data) and action, and how we seek to ensure future actions reflect these data-driven insights. Analytics is not simply capturing the monitoring of metrics; it focuses on driving insight and action from past, and even current, behaviors and information.
Analytics help us (1) discover what has changed, (2) anticipate what will change, and (3) become more proactive making business operations decisions. For example, in the retail industry, sifting through historical purchasing data and social media buzz (via Twitter trending and Facebook likes) allows an organization to anticipate that a historically hot product is about to lose interest. They can then quickly use this information to change their shelving plans for the product, replacing it with a new “up-and-coming” product and communicate to their suppliers to cut back on overall production. As detailed in this example, the use of analytics enables organizations to get ahead of the game by giving executives the ability to make sound business decisions more quickly.

THE CASE FOR ANALYTICS

Analytics isn’t simply a buzzword—a multitude of studies show that organizations are investing, or planning to invest, in developing their analytical capabilities. Companies are starting to realize the competitive advantage that exists with analytics. The organizations that have been early adopters confirm the belief that analytics give them a competitive advantage and allow them to be more nimble in the marketplace.

A 2010 study by MIT Sloan and IBM showed that top-performing companies leveraged analytics to drive business decisions. A refresh of the survey data in 2011 showed the number of organizations that “believe analytics provide a competitive advantage” grew by 57% in one year. Furthermore, the TDWI 2011 study showed that while 38% of organizations surveyed practice advanced analytics, 85% said they would be practicing it within three years. The analytics arms race may have begun, and if organizations are not using analytics to support business decisions, some data suggest they may ultimately lose their competitive edge.

The case for analytics is further supported by the growth in data available to companies. An Aberdeen survey in 2012 showed that average storage capacity required by organizations grew 35% from 2010 to 2011. Installation of ERP, Customer Relationship Management (CRM), and BI tools has increased the available data and provided a giant statistical sample for enterprises to mine and analyze. As Figure 3 shows, companies are expecting the volume of data used in analytics to increase dramatically in the coming years.
The past decade has seen an investment by organizations in a variety of technologies and tools to help their business, from ERPs to Business Intelligence tools. It is the integration of such tools that can enhance the use of predictive analytics.

However, while organizations anticipate their data volumes to grow, the majority is not yet certain how they will manage such large amounts of data, nor whether they can distill key insights from such data in the speed necessary to inform business decisions.

THE CHALLENGES FACING ANALYTICS

Unfortunately, challenges continue to exist for companies trying to leverage data and incorporate analytics into their strategic and operational decision-making. From ScottMadden’s perspective, the two biggest challenges facing organizations today reside in the integration of technology and the changing demands on their talent pool that analytics demands.

Data integration, disparate systems, and information flow are often highlighted as barriers to making data work in the company’s favor. The 2011 CFO Research Services study showed that lack of integration and data variety accounted for three of the top six challenges facing senior finance executives in harnessing data for decision-making.
Data integration is critical because it affects both the quality and the speed by which data can be assimilated, analyzed, and digested. It helps drive the cross-functional views and enables a better understanding of the overall business. However, integration by itself is not the only issue. The 2010 study by MIT Sloan and IBM showed the top three obstacles to widespread adoption of analytics in respondents’ organizations were focused on lack of resources and skills (“Analytics: The New Path to Value,” IBM Institute for Value and MIT Sloan Management Review, 2010). Knowing how to use and translate data into insight and action is one of the biggest hurdles facing companies on their path to leveraging predictive analytics.

This lack of analytics skill sets is forcing companies to recruit differently and reskill their resources, as well as creating specialized departments to focus on such recruitment and development activities. A recent 2012 finance survey by the Corporate Executive Board (CEB) found that only 29% of 70 corporate Financial Planning & Analysis (FP&A) heads identified that they consistently deliver insights about the business. This needs to change if they want to stay competitive. Data transformation is forcing companies to change who they are staffing in corporate roles—analytical mindsets and a focus on insight generation and storytelling are becoming a premium.
However, if organizations are willing to focus their efforts on overcoming these obstacles, the end state so often described is not an unrealistic outcome. As the three examples below show, companies are integrating technologies and pooling resources together to help bring insight and drive value through the use of analytics. Such investments can pay off if the appropriate investments are made.

**Integrating Technology: Procter & Gamble**

Procter & Gamble (P&G) CEO has been on a “mission to ‘digitize’ the companies processes from end to end” and has been developing and building its analytics since 2009 with the launch of its Business Sufficiency Program.

The program leverages a series of analytical models helping executives interact with the data to predict market share and other key performance indicators 6 to 12 months into the future.

The models focus on exception, are predictive, allow for scenario planning, and aggregate data from across P&G. The result is the pace of decisions has increased, and data has moved out of silos.

**Focusing on Analytical Skills: The Dow Chemical Company**

The Dow Chemical Company has an Advanced Analytics Group that conducts analytics for the organization at large in a variety of areas.

In a 2011 example, the group leveraged a large amount of historical data from within their supply chain and the external market to better understand the statistically significant drivers of their raw material prices.

The analysis was unique for Dow’s supply chain, and it led to better anticipated pricing and improved supply chain cost predictions.

**Leveraging Technology and Resources: Hewlett Packard’s Global Business Services**

Hewlett Packard’s (HP) Global Business Services (GBS) has been at the forefront of analytics in a shared services environment. Having delivered on the more traditional, multi-function shared services for the company over 10 years, GBS had to expand the focus from simply cost efficiency and tight operations management to more value creation and transformation. Two examples showcase such efforts:

- Customer intelligence analytics – Partnering with Marketing and Strategy, GBS provided analysis of the customer base to identify optimal targets for technology refreshes, potentials for re-sale or up-sale, etc.
- Early renewal reporting – Monthly analytical reporting services to the Sales function identified service contracts that were expiring, but had not yet been followed up on for renewal
CONCLUSION

The investments in technology and talent that companies need to make to achieve the benefits of business analytics are not insignificant. However, as shown by several companies already leveraging business analytics, the value of such analysis can provide a competitive advantage. The key question for organizations now is how to make the necessary technology and talent investments work best for them in order to help position themselves competitively. ScottMadden believes the pursuit of, and need for, expensive technologies and specialized skills leads to sharing analytical services across corporate functions. In many ways, shared services may provide the best vehicle to overcome the biggest obstacles facing a company’s goal of implementing business analytics. For more detail on shared services’ role in business analytics, please read ScottMadden’s paper titled “Business Analytics: The Next Wave of Value for Shared Services.”

MORE INFORMATION

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