Beyond the dashboard

Unleashing the true value of business intelligence
Contacts

Amsterdam
Marco Kesteloo
Partner
+31-20-504-1942
marco.kesteloo
@strategyand.pwc.com

Frankfurt
Andreas Späne
Partner
+49-69-97167-408
andreas.spaene
@strategyand.pwc.com

Moscow
Dr. Steffen Leistner
Partner
+7-985-368-7888
steffen.leistner
@strategyand.pwc.com

São Paulo
Ivan De Souza
Senior Partner
+55-11-5501-6368
ivan.desouza
@strategyand.pwc.com

Chicago
Tom Casey
Partner
+1-312-578-4627
tom.casey
@strategyand.pwc.com

London
Alan Gemes
Senior Partner
+44-20-7393-3290
alan.gemes
@strategyand.pwc.com

San Francisco
Douglas Hardman
Partner
+1-415-653-3537
douglas.hardman
@strategyand.pwc.com

Stockholm
Per-Ola Karlsson
Partner
+46-8-506-190-49
per-ola.karlsson
@strategyand.pwc.com

Düsseldorf
Dietmar Ahlemann
Partner
+49-211-3890-287
dietmar.ahlemann
@strategyand.pwc.com

This report was originally published by Booz & Company in 2010.
Executive summary

Business intelligence is often seen as a software solution designed to serve up data on executive dashboards. But this is a wasteful and costly misunderstanding of the value of true business intelligence. When deployed properly, business intelligence should help define strategy, drive profitability, and develop a performance-oriented culture throughout an organization. It is much more than a reporting tool. Using business intelligence is a way of doing business.

To work in this way, the approach to business intelligence implementation must be comprehensive and must focus on thoughtful, custom-crafted metrics that will measure progress toward specific goals. Conceiving these metrics is among the most important, and most difficult, aspects of business intelligence. The process requires an honest assessment of a company’s strengths and weaknesses. Without metrics that are strategically sound, companies run the risk of becoming distracted and losing focus on what is most important.

Getting the most out of a business intelligence deployment means following a rigorous set of guiding principles, assigning clear roles and responsibilities, and managing change throughout an organization. It means working closely with an ecosystem of partners that will establish the foundation and guide the implementation. And it means staying focused on getting the right metrics to the right people at the right time.
Intelligent business

True business intelligence is exactly what it sounds like. It is the ability to make sense of markets; to measure the progress of a company against its goals; and to employ the skills, processes, technologies, applications, and practices used to support good decision making. It is not a software solution. It is not a methodology. And it is not easy.

Very few companies in the world have the discipline to focus their operations in every business unit and product line on the things they do best. Those that do are the companies that identify their strongest internal capabilities and set thoughtful, strategic goals. And they constantly, almost obsessively, measure their performance against those goals.

That’s where business intelligence comes in. When it’s used correctly, business intelligence presents a way of identifying the strengths and weaknesses of a company. It can inform strategy and drive profitability. And it can transform the culture of a company, from top to bottom. In fact, we have worked with companies that have realized more than US$1 billion in savings, and set up systems that drive top-line growth and ensure lasting profitability.

Many companies have stumbled in their early attempts to leverage this performance-driven approach to running a business by going down the path of measuring thousands of unnecessary performance indicators, rather than those that really matter. Before a company can begin measuring its progress against goals, it needs to identify those goals. To do this requires a much more thoughtful approach than most companies have taken to date. A business intelligence deployment must follow a rigorous set of guiding principles. It requires carefully considered metrics that align with strategy, drive value, ensure accountability, can be easily executed, maintain quality and consistency, and manage interdependency. And it requires a deep understanding of what a company is, and what it would like to be.
The problem with business intelligence (BI) has nothing to do with the quality of the products. Most off-the-shelf BI software is easy to implement; incredibly powerful; rich with features; and capable of aggregating, integrating, and analyzing data from nearly any part of a business. And it’s not that companies don’t need business intelligence: Gartner Inc. predicts that through 2012, 35 percent of the top 5,000 global companies will regularly fail to make insightful decisions, owing to a lack of information, processes, and tools.

The problem with business intelligence is how companies approach it (see “Steps to Success,” page 10). Many companies believe that BI is a software solution that simply needs to be bought and installed. They use it narrowly and follow the wrong metrics. And despite the significant procurement, installation, and maintenance costs, business intelligence is often used to serve up inaccurate data or distract employees by delving too deeply into corporate minutiae. In fact, it is no exaggeration to say the true value of business intelligence has been heretofore widely misunderstood.

Ultimately, business intelligence is the key to running a performance-oriented company. This means that any BI deployment has strategic, operational, and cultural implications. And perhaps no aspect of a BI implementation is more important — or more difficult — than choosing metrics that are strategically and mathematically sound.

Metrics that do not accurately measure a company’s progress against its goals can have employees chasing their tails. Metrics must be crafted and customized to fit a company’s specific goals. For example, a series of Strategy& studies conducted over the past seven years with consumer products, healthcare, and chemical companies statistically correlates return on innovation investment (ROI²) with organic growth and links innovation spending with financial performance in ways that can lead decision makers to generate higher, more reliable returns on innovation and research and development (see Exhibit 1, next page). A company recently employed ROI² to better understand its innovation efficiency from research and development efforts. In particular, company leaders wanted to know the benefits and associated costs of their innovation expenditures.
It’s not uncommon for product-oriented companies to throw money at research and development in hopes of increasing profitability. But not all R&D is created equal. By closely measuring ROI\(^2\), the company gained a clearer sense of where its money was best spent.

The statistical validity of ROI\(^2\) bolsters its value as a metric, but so does the fact that it functions as a leading indicator, helping decision makers anticipate what their product portfolio will look like in the future. Too often, companies rely on lagging indicators that accurately report past performance while giving no indication of what lies around the next bend.

Good metrics have other temporal considerations. Some — such as ROI\(^2\) — guide strategic decision making over the longer term, perhaps for the next year. Others (e.g., sales win rate) can help monitor weekly or monthly performance. A daily dashboard may report essential metrics (e.g., client issue escalations) that are important to manage on a day-to-day basis. All have a role to play as part of an effective BI strategy.

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\(^1\) Revenue growth = 2003–2005 after adjustments to minimize impact of an acquisition and other one-time events.

\(^2\) ROI\(^2\) is taken as a percentage of revised 2005 revenues to minimize size bias.

Source: Strategy& analysis
Best-in-class business intelligence — and the metrics selected to support it — exhibits six characteristics. In successful companies, performance criteria align with strategy, drive value, ensure accountability, can be easily executed, maintain quality and consistency, and manage interdependency (see Exhibit 2, next page).

Each company will weight these criteria differently. For example, one leading global logistics provider, which had grown to more than 470,000 employees in 220 countries, placed an emphasis on maintaining quality and consistency. Because of a series of acquisitions, the company had established a strategic imperative to improve its financial controls and reporting standards across divisions. It needed to reduce complexity, improve transparency, and transition from intuition to fact-based decision making.

The company designed, implemented, and deployed a unified system for management and shareholder reporting, financial and country consolidation, and forecasting and planning. The new common reporting system consolidated four business units and more than 3,000 reporting entities worldwide. And the key performance indicators that emerged as a result improved financial reporting capabilities, increased financial control and transparency throughout the company, and harmonized the financial systems. The company saved more than €1 billion (approximately US$1.4 billion) as a result.

Meanwhile, a global software company worked to align its strategy by measuring the relative value of growth (RVG) — an assessment of the strength the market places on revenue growth relative to margin growth — across its entire product portfolio and balancing that portfolio with company strategy. From the beginning, the company built a clear message about its goal of improving top-line growth and share price and built a strong case throughout the company (and externally) for change. As a result, the company drove top-line growth from 4 percent to 7 percent and nearly doubled its stock price in two years.
Exhibit 2
Six characteristics of best-in-class business intelligence

Metrics selection and performance measurement criteria

<table>
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<th>Characteristic</th>
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| **Align with strategy** | - In line with company’s strategy & culture  
- Clearly articulated  
- Strong leadership commitment  
- Supporting governance structure |

| **Drive value** | - Link financial & operational targets  
- Focused on value drivers  
- Provide leading & lagging indicators  
- Reinforced with consequences |

| **Ensure accountability** | - Individual accountability & ownership for performance  
- Ambitious commitments  
- Strong message regarding performance  
- Supporting incentive system |

| **Can be easily executed** | - Provide management insight  
- Simple-to-use systems & processes  
- User-friendly systems interface & intuitive report design  
- Provide “right time” information |

| **Maintain quality & consistency** | - Consistency & transparency  
- Holistic (tools, processes, roles)  
- Balance flexibility & standardization  
- Track progress over time, across products  
- Provide a “single version of truth” |

| **Manage interdependency** | - Allow use of feedback to change metrics  
- Have adaptive capabilities & enable corrective action  
- Enable use of external developments |

Source: Expert interviews; articles from specialized journals (Journal of Performance Management, Business Performance Magazine); James W. Smither, Performance Management: Putting Research into Action; Pfeiffer; Strategy& analysis

Other examples:

- A major European stock exchange implemented a BI solution to create a unifying force within the organization as well as manage costs. The implementation provided confidence for executives and drove a sense of urgency within the organization through a new culture of goal setting and performance tracking. Also, reporting was streamlined, helping to lower operating costs by 25 percent.
A global energy company implemented a robust BI solution with the goal of simplifying its reporting process. Over the course of 20 months, the company decreased the number of financial systems by 40 percent, accounting units by 46 percent, and reporting units by 61 percent. The solution shortened the planning cycle by three months and the standard reporting by 150 pages with each cycle, leading not only to cost savings but, more important, to a new focus on higher-value activities.

But the work doesn’t end once companies have determined their criteria weighting and acted accordingly. It is critical that performance metrics and incentives be continually revisited to ensure they are aligned with strategy. That’s why companies should employ a continuous metrics improvement process, to manage and govern the use of metrics to drive value (see Exhibit 3).

**Exhibit 3**

Continuous metrics improvement process

1. **Create & develop**
   - Understand capabilities & needs
   - Select ones with highest value
   - Validate

2. **Manage & govern**
   - Governance committee
     * Assess & drive quality and finalize definitions, thresholds & targets
   - Assign owners & viewing rights
   - Manage usage
   - Transparent process
   - Widely available
   - Actionable (with “temporary” metrics as possible alternative)

3. **Utilize & drive value**
   - Highly reliable
   - Good enough to use

4. **Retire & refresh**
   - End of life

Source: Strategy&
**Steps to success**

Successful BI implementations follow a set of guiding principles that fall into four categories.

**Foundation**

1. *Drive the case for change from the top down and the bottom up.* A BI implementation will be successful only if people use it. And this kind of change can be intimidating at any level of a company. To ensure success, work to foster demand for the tools from the front line, while insisting the tools be adopted in the executive ranks.

2. *Define BI comprehensively.* Business intelligence is not just metrics. A BI deployment changes the approach to how business gets done, putting a larger onus on performance measurement and accountability. Be certain your company’s approach is equally comprehensive, including metrics, processes, systems, and change management.

3. *Develop a modular approach.* BI projects can touch nearly every data source in a company. Use agile development practices to ensure a flexible, faster, and more effective deployment.

**Design**

4. *Focus on the right metrics.* This is where the truly coherent, capabilities-driven strategy gets implemented. The metrics should be tightly aligned with strategy and essential capabilities. They should include both internal and external inputs. And they should consist of a balance of leading and lagging indicators.

5. *Keep it simple.* BI software can drill down to the most irrelevant minutiae within a company. And it can slice and dice information in hundreds of different ways. Keep the distractions to a minimum. Include only the most important metrics from the top three or four levels.

6. *Build a unified BI system.* Companies are complex systems with hundreds of hidden interdependencies. BI systems can uncover some of those complexities and allow great visibility into the way a company operates. To enable this, however, you must integrate data across the company, to allow root cause analysis and custom analytics.

**Pilot/rollout**

7. *Launch early.* Getting an early return for a project like this can go a long way toward sustaining its success. Start off with existing high-quality metrics in high-priority product groups and functions to add value and build momentum.

8. *Detail system requirements and select partners.* Working closely with IT will be a critical factor during this stage. Be sure to objectively assess options for project management, systems integration, and software tools.

9. *Leverage existing infrastructure.* A business intelligence implementation is going to run across the breadth of a company’s IT infrastructure. Although you don’t want to wait for new systems before building out BI capabilities, you must ensure that BI software works alongside the future vision for IT and the business. The good news is that BI software is often a “front end,” which

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allows for a high degree of flexibility in the back end.

Change management

10. Establish central governance structure. Business intelligence is not like any other enterprise application. It requires collaborative ownership and oversight. It requires business-led governance with IT support. And it requires new data management roles and functions, robust metric life-cycle management, and strong ongoing project management.

11. Proactively manage change. This is not a build-it-and-they-will-come scenario. Adoption must be driven throughout the enterprise. Dashboards and metrics must have teeth, with accountability and incentives. And management must train, communicate, and secure senior leadership in driving behavioral change.
None of the value of business intelligence is gained without the support and leadership of key stakeholders (see “Project Pitfalls,” page 14). The roles that employees assume in rolling out a BI implementation can be just as important as the metrics themselves. That’s why forward-thinking organizations, including the United States government, the NEC Corporation, and Yahoo, have assigned chief performance officers (CPOs).

The rise of the CPO tells us something important about business intelligence and the culture of performance a BI system cultivates. Metrics, and the changes they enable, are of the utmost importance to an enterprise. They must be managed from the highest executive ranks, and by the executives most directly responsible for the performance they reflect. In the case of finance-oriented dashboards, that is likely to be the chief financial officer; operations-focused dashboard initiatives may fall under the control of the chief operating officer, or even business unit heads.

This is not to say the chief information officer doesn’t play a critical role in selecting, implementing, and managing business intelligence. In fact, the CIO should lead the technology design and the selection of software and systems integrator. The CIO should also manage the data quality and the build-out of the system. Successful BI implementation depends on broad, business-based support and cross-functional input. And it depends on the multidisciplinary capabilities and ecosystem of your partners (see Exhibit 4, next page).
Exhibit 4
BI implementation goes beyond metrics

Partner ecosystem

Program management
Change management
Business design (metrics, targets)
Technical design (metrics, dashboards)
Vendor selection & sourcing

Technical design for ETL interfaces
ETL interfaces & application modifications
System build, test & rollout
BI system setup & rollout
BI software specialists
ETL software specialists
Analytics tools

Note: ETL = extract, transform, and load.

Source: Strategy&
**Project pitfalls**

Any major change to the way an organization measures success is sure to have a few pitfalls. Below are seven of the most common issues that come up during a business intelligence implementation, and some suggestions on how to address them before they arise.

**Risk 1: Lack of sustained leadership support**  
*Preemption:* Designate project champions at multiple initiative levels; incentivize leadership and management to encourage a sustained level of effort; continue to build organizational pull.

**Risk 2: Partner failure (e.g., systems integrator, BI tool vendor)**  
*Preemption:* Thoroughly evaluate potential external contractors and confirm adequate track records; negotiate effective financial controls contingent on project success into external partner contracts.

**Risk 3: Project delays or scope creep resulting in loss of organizational momentum**  
*Preemption:* Ensure strong project management capabilities; set stretch targets and manage through modular releases; clearly define project scope and do not change scope without time/resource changes.

**Risk 4: Development halted to accommodate systems changes**  
*Preemption:* Utilize a modular approach to implementation to prevent collective progress interruptions; effectively plan future upgrades and schedule within the context of other system changes.

**Risk 5: Security breaches**  
*Preemption:* Leverage role-based security tools; implement central governance and improved data control.

**Risk 6: Unintended consequences of focusing on wrong metrics**  
*Preemption:* Outline and document metric choices, including secondary impacts; implement a flexible architecture and processes that can accommodate routine upgrades, including metric adjustment.

**Risk 7: Organization resists tracking and acting on metrics and targets**  
*Preemption:* Clearly show support for project and broader goals at the executive level; align incentives at both the department and individual levels to encourage adoption; reinforce behavioral changes that create transparency and information sharing.
A business intelligence implementation may seem like a daunting undertaking, fraught with risks and bounded by rules. But it is not an action intended to be undertaken alone. An ecosystem of vendors, integrators, and business consultants work together to ensure the success of a well-conceived BI project. Together with these providers, a company can understand the current state of metrics, systems, people, and management and define a future vision.

But whatever team a company assembles, applying business intelligence properly is the only way to make an impact on an organization. That means first understanding the potential for business intelligence to define and measure strategy, and then following the guiding principles to make that happen. Anything else would be less than intelligent.

Resource

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This report was originally published by Booz & Company in 2010.