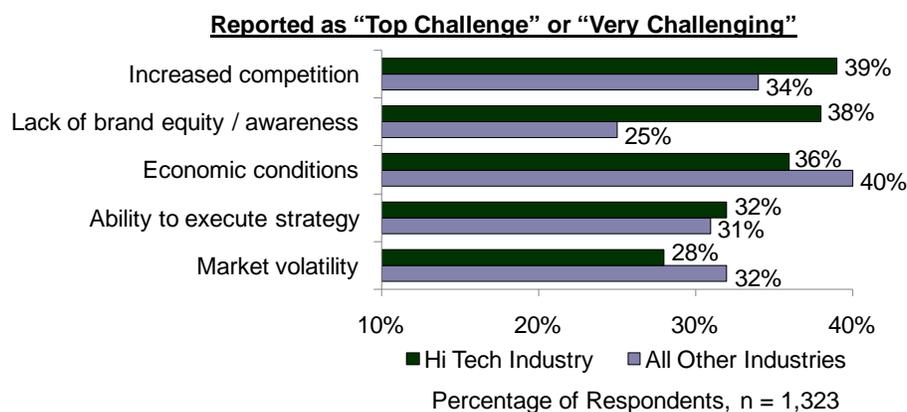


## BI in the High Tech Sector: Driving Differentiation in a Crowded Industry

Following in the footsteps of a long legacy of rapid innovation – semiconductor advancements, the PC revolution, mobile technology adoption – today’s high-tech organization is challenged to make its mark in a crowded landscape that now boasts more maturity in open source technology, Software-as-a-Service (SaaS), and cloud-based infrastructure as well. First quarter results from *Aberdeen’s Quarterly Business Review* survey bolster these concepts in depicting the two most pressing challenges affecting high-tech companies (including software, hardware, service providers, and technology consultancies) are increased competition and a lack of market awareness. In order to address those challenges and differentiate their organization’s many high-tech companies are turning to the operational visibility and business discovery capabilities of business intelligence (BI) strategies and technologies. By nurturing the analytical mindset living inside their organizations, Best-in-Class companies are equipping business users with the tools they need to make faster and more informed decisions, facilitating the tangible improvements required to boost revenue, customer satisfaction, and market presence.

This Aberdeen Sector insight draws on two discrete data sets in order to investigate the measurable impact of business analytics within the high-tech industry. The research reveals that many of these companies, despite their inherently tech savvy nature, aren’t fully exploiting their analytical potential, and face significant opportunities to differentiate themselves through the efficient deployment and usage of business analytics.

**Figure 1: Most Pressing Business Challenges of 2011**



Source: Aberdeen Group, April 2011

### Sector Insight

Aberdeen’s Sector Insights provide strategic perspective and analysis of primary research results by industry, market segment, or geography

For the purpose of clarification, this document defines the high tech industry as encompassing the following subcategories:

- √ Hardware providers (computer equipment & peripherals)
- √ Software providers
- √ Technology service providers (systems integration, IT service management & consulting)
- √ Other technology providers

### Recommended Actions

Strategic recommendations for high tech organizations looking to develop a deeper and more effective strategy for business analytics:

- √ Establish formal programs to build analytical skills and mindset
- √ Measure and track analytical usage and engagement
- √ Improve collaboration with external stakeholders

## Business Context

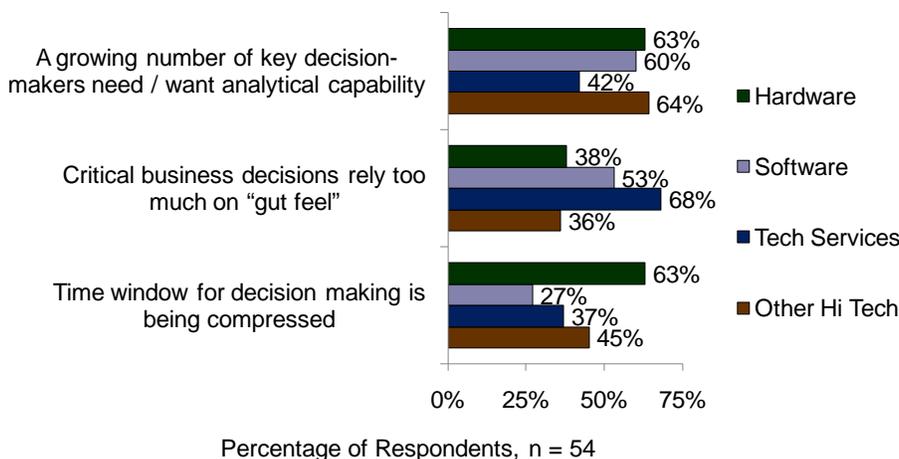
The recent signs of economic recovery are as frequent as they are short-lived. The only certainty in the volatile global marketplace seems to be that nothing is certain, and organizations remain cautious as the business landscape continues to fluctuate. However, first quarter results from [Aberdeen's Quarterly Business Review](#) survey demonstrate that while the majority of industries are most challenged by these very macro factors like the economic downturn and general volatility of the market, high-tech companies have different priorities. The biggest issue for these organizations is increased industry competition and a lack of awareness or brand equity in a crowded market (Figure 1, above).

Building the proverbial "better mousetrap" and generating disruptive technology has historically been a recipe for success for many organizations, but unfortunately for others, that model doesn't always hold up. Companies in the high tech world are increasingly looking for other ways to set themselves apart from the competition. Creating an environment that espouses business discovery and promotes an analytical mindset is an increasingly powerful way to identify, prioritize, and execute against tangible business opportunities and companies are increasingly leveraging business analytics for this purpose.

## The Growing Analytical Imperative

Three main factors continue to drive the adoption of business analytics across a multitude of industries: more business users need analytical capability, managers looking to remove or mitigate the guess work in their decision making, and a compressed time frame for making mission-critical decisions. Aberdeen's forthcoming benchmark report, [The Analytical Masses: Building Self-Service Insight for Line-of-Business Decisions](#), reveals that high-tech organizations share these top business pressures (Figure 2).

**Figure 2: Top Pressures Driving BI within High Tech Companies**



Source: Aberdeen Group, June 2011

### Fast Facts

- √ **26%** of high tech organizations report using mobile BI
- Compared with:
- √ **10%** of companies in all other industries

"In our business, service coupled with technology is the No. 1 distinguishing feature and selling proposition. Accordingly, we lay great focus by constantly improving our performance in this field. BI makes a really significant contribution to this. Because of the fast, comprehensive analyses it provides, we can accurately work out how well our service is running—not just internally, but also with our outsourcing partners. Thus, we can immediately make any adjustment necessary if the high bar we set ourselves on quality is not being reached at any particular site."

~ Bernd Riedel

Service Manager - Service Engineering

Toshiba Europe

The value of efficient business analytics is no longer relevant only to the technically or statistically inclined analyst or power user. Many of today's BI tools are designed specifically to address the need for more analytical firepower in the hands of non-technical business decision makers, and increasingly this very pressure is what drives organizations to adopt a company-wide strategy for business analytics.

While there are a multitude of intangible benefits to efficient business analytics – more reliable data, self-service discovery and analysis, quicker decisions – the most important performance metrics are the key line items on the P&L and cash flow statement. Aberdeen's research validates this claim in revealing that survey respondents from the high tech industry believe that the three most important business performance metrics are: revenue (74% of respondents); operating profit (39% of respondents); and operating cash flow (35% of respondents).

The research shows that high tech organizations have been more successful than most in leveraging business analytics to drive improvement in these key areas, but there is still considerable room for improvement as they look to emulate top performing companies and deliver the performance of a Best-in-Class company (Figure 3).

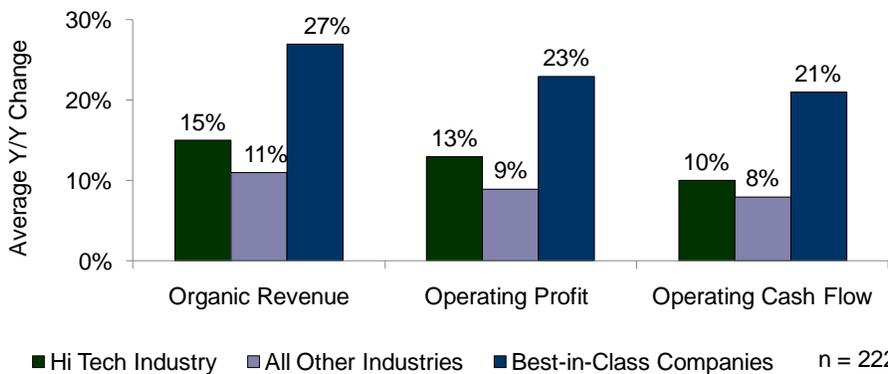
**Best-in-Class Definition**

The majority of data used in this document was taken from Aberdeen's forthcoming benchmark report, [The Analytical Masses: Building Self-Service Insight for Line-of-Business Decisions](#).

Best-in-Class performance from this benchmark report is defined as follows:

- √ 27% year over year increase in organic revenue
- √ 95% of respondents are satisfied with their decision support capabilities
- √ 94% of critical information is delivered on-time

**Figure 3: Best-in-Class Performance Enhancements with BI**



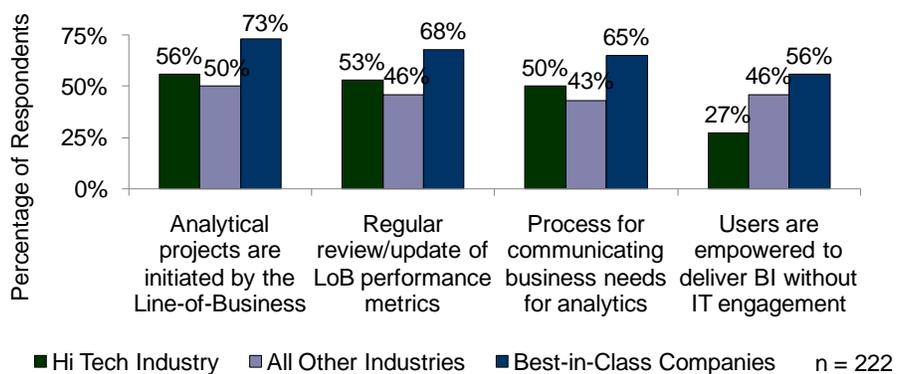
Source: Aberdeen Group, June 2011

**Best-in-Class Characteristics**

As is typically the case with most types of technology, the performance enhancements achievable through the use of BI has less to do with the technology itself and more to do with an organization's ability to align its internal resources properly to maximize the usage and the business value created from deploying the tools. When it comes to creating this analytical environment and executing on the potential of business analytics, Best-in-Class companies share several common traits that enable them to perform at a higher level. Arguably the most prominent of these characteristics is the focus that Best-in-Class companies have on building line-of-business (LoB) engagement and ownership of business analytics. Rather than having

reports and data views forced on them from the IT department, the functional decision makers who have domain expertise in their own business areas should be the ones driving analytical projects. The focus on business users doesn't stop there for top performing companies. In addition to the fact that BI projects originate with the LoB, Best-in-Class companies are also more likely to create consistent lines of communication with their key business decision makers to understand and deliver on their analytical requirements, and to ensure that the performance metrics used to measure success are continuously evaluated and updated (Figure 4).

**Figure 4: Key Organizational Capabilities in Place**



Source: Aberdeen Group, June 2011

Looking at the data from an industry perspective reveals one key area where high tech companies are severely lacking. Delivering analytical capability in a self-service capacity with little or no involvement from the IT department is a capability that reliably correlates with Best-in-Class performance. Only 27% of high tech companies report that they empower and enable their business users with BI capability without relying on or utilizing precious IT resources. Creating this self-service environment enables business leaders to explore their functional areas, ask better questions, and deliver vital decision support in advantageous time frame to impact the business in a meaningful way. On the flip side of this coin, by reducing the endless pile of report requests and data view changes, the IT leaders are free to focus on more mission-critical aspects of the information environment and provide a more reliable supporting infrastructure.

Another hallmark of a Best-in-Class company is related to the pervasiveness of their analytical strategy. The performance metrics shown in Figure 3 represent the output of business efficiency across a variety of different stakeholders in the organization. Sales, marketing, and customer service, to name a few, are primarily charged with growth. Finding new customers and developing existing ones are the strong suit of these functions. Conversely, departments like logistics, procurement, inventory management and supply chain, are typically more focused on efficiency (i.e. reducing cost, improving process efficiency, optimizing workforce activity). Aberdeen's data shows

**Fast Facts**

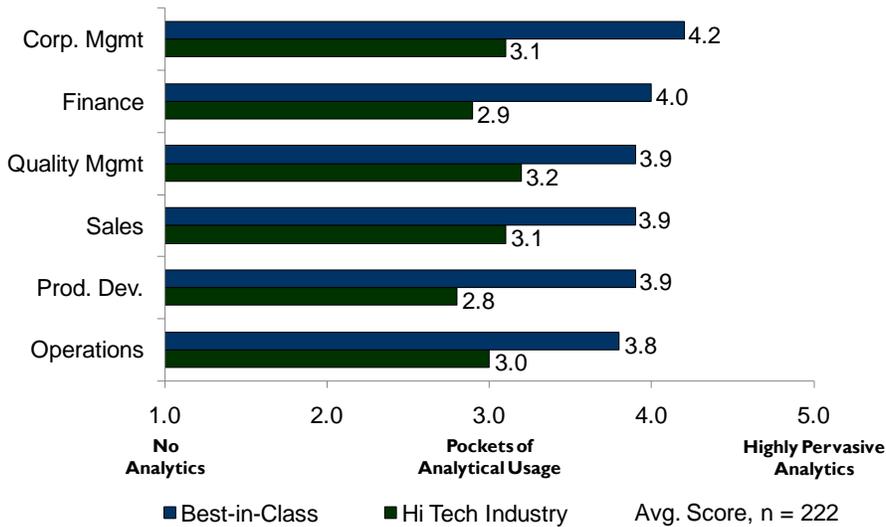
- ✓ **56%** of high tech organizations report using data integration technology
- Compared with:
- ✓ **36%** of companies in all other industries
- And
- ✓ **43%** of high tech organizations report using data cleansing tools
- ✓ Compared with:
- ✓ **30%** of companies in all other industries

"For us, BI is not just dumb reporting, it is truly driving action within Canon. Easy-to-understand dashboards have made it easy for us to analyze strategies. In fact, users are now demanding enhancements in the applications."

~ Shikha Rai  
Director of IT  
Canon India

that Best-in-Class companies report having a higher degree of analytical pervasiveness across a multitude of business functions (Figure 5).

**Figure 5: Analytical Adoption by Business Function**



Source: Aberdeen Group, June 2011

By arming more business users with analytical capability on both sides of the business front - growth and efficiency - top performers put themselves in a position to supplement their business experience with fact-based decision support across multiple functional areas, ultimately facilitating a broader and more tangible impact from business analytics.

**Case Study — Autodesk**

Headquartered in San Rafael, CA, Autodesk is a world leader in 3D design, engineering and entertainment software. Autodesk serves more than 10 million users and 800,000 companies who use their variety of software products. Customers range across manufacturing, architecture, building, construction, and media and entertainment industries --including the last 16 Academy Award winners for Best Visual Effects.

The biggest challenges Autodesk faced included the need to consolidate more than 25 years of customer and product data from multiple sources. By the same token, they were looking for a way to remove IT from the process of creating dashboards while still allowing for some control and governance of data. With some of the prior solutions Autodesk used, it took too long for users to get the answers they needed to make informed business decisions.

After a comprehensive search process, Autodesk selected an in-memory BI solution mainly for its speed and intuitive ease of use for a broad roll

*Continued*

**Fast Facts**

Top Best-in-Class strategic actions for business analytics:

- ✓ Provide access to analytical capability for more users in the organization - 55%
- ✓ Assign business analytics as a strategic priority - 53%
- ✓ Align business goals to key performance indicators (KPI)- 53%
- ✓ Enable customized analytical functionality to meet specific department needs - 39%

### Case Study — Autodesk

out to every organization and business process across the company. The solution was quickly deployed and enabled a variety of decision makers across the organization to perform their own self-service discovery, without having to rely on IT. In the first six weeks of using this widespread BI tool, Autodesk had 11 dashboards in use and 30 more in development. They now have the ability to pull data from over 30 data sets delivering important information to users at all levels. Two of the most vital dashboards created were able to track the adoption of their various products, and monitor the activity and opportunities available within major accounts. “Our BI tool moves at the speed of business and not the back office, and that’s what Autodesk needs”, reports Patrick Booher, Director of Enterprise Data Management at Autodesk.

With the solution deployed quickly and broadly across the organization, product managers now have real time insight into terabytes of data for each product, letting them make timely and informed product decisions. The implementation of BI across a variety of business functions Autodesk has seen substantially decreased resource utilization, time and cost previously required to maintain a flexible and scalable solution, ultimately leading to improved visibility into data results in more strategic sales, customer service and revenue opportunities.

### Recommended Actions

According to *Aberdeen’s Quarterly Business Review*, 81% of the 1,323 companies surveyed plan in increasing their technology budget for fiscal 2011. Because of this ever increasing appetite for technology within the business world, the landscape of high tech companies is fragmented and fraught with competition as organizations fight for their slice of an increasing pie. Cross-industry lessons learned from Best-in-Class companies demonstrate that business analytics can deliver the type of game changing performance improvements needed for effective differentiation. Leaning on the technical prowess inherent within their organizations, high tech organizations have the opportunity to exploit an analytical strategy for substantial performance enhancements. The following recommendations serve as a roadmap for high tech companies looking to extract the maximum value from business analytics and transform their organizations into industry leaders:

- **Establish formal programs to build analytical skills and mindset.** Some business users are born with a natural inclination towards analytics, a curiosity to understand what drives their business and how those factors can be improved. Other users need a push in that direction by displaying the power of business analytics in terms more relevant to their particular area. Best-in-Class companies are 4.1-times more likely than Laggards to have

programs in place to train business users and build analytical mindset from within the organization

- Measure and track analytical utilization and engagement.** Companies that deliver on their user needs for analytics, and provide more usable solutions that can touch more area of the business, are reaping the benefit of visibility and opportunity identification that analytical tools provide. The research shows that Best-in-Class companies are over 10-times more likely than Laggards to track the utilization of, and engagement in, business analytics.
- Improve collaboration with external stakeholders.** The list of individuals and groups that can affect the performance of a company is as diverse as it is globally dispersed. The "extended enterprise" encompasses all stakeholders from customers and distribution partners to suppliers and even regulatory agencies. There is tremendous value in the data itself, but not nearly as much value as in the proper interpretation of that data. The research shows that while a majority of companies are sharing data and collaborating across internal business functions, only 30% report having that same level of cooperation with external stakeholders.

"We're focusing on BI to use our information more proactively, because of its combination of a light footprint, speed, and excellent visualisation functions, based on the principle that IT systems are an extension of business process re-engineering."

~ Yoshioka Kazuharu

Business Process Re-engineering Centre Manager

Panasonic

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Related Research	
<p><a href="#">Business Intelligence on the TCO Diet: Slashing the Cost of Insight with Analytical Fitness</a>; May 2011</p> <p><a href="#">Business Answers at Your Fingertips: The Real-Time Value of BI</a>; April 2011</p>	<p><a href="#">Public Sector Analytics: Optimizing Resource Usage with Data-Driven Decisions</a>; May 2011</p> <p><a href="#">Embedding BI in Enterprise Applications: Magnifying the Analytical Impact</a>; March 2011</p>
<p>Author: Michael Lock, Senior Research Analyst, Business Intelligence (<a href="mailto:michael.lock@aberdeen.com">michael.lock@aberdeen.com</a>)</p>	

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