

# **The Analytical Masses**

Building Self-Service Insight for Line-of-Business Decisions

July 2011

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## Executive Summary

Once reserved for the technically trained or statistically inclined, Business Intelligence (BI) and analytical tools have now become more relevant to, and coveted by, a diverse group of non-technical business users. Boasting the ability to gather relevant business data, apply functional specific knowledge to that data, and deliver timely business insights based on its manipulation, the business analytics philosophy has now become a priority for many organizations. This report focuses on the linkage between a burgeoning analytical mindset and the line-of-business activity required to survive and thrive in a rapidly changing marketplace. The research presents a demonstrable connection between analytical adoption, pervasiveness, and engagement from line-of-business decision makers, and elevated business performance. This report is based on feedback from 222 executives in May and June 2011, across the globe.

### Best-in-Class Performance

Aberdeen used the following three key performance criteria to distinguish Best-in-Class companies:

- **27%** year over year increase in revenue, compared with a 12% increase for the Industry Average and a 1% increase for Laggards
- **95%** are satisfied with their decision support capability, versus 68% of the Industry Average and 26% of Laggards
- **94%** of critical information is delivered on-time, compared with 77% for the Industry Average and 41% for Laggards

### Competitive Maturity Assessment

Survey results show that the firms enjoying Best-in-Class performance are:

- **2.4-times more likely** than Laggards to have an executive level sponsor or champion for business analytics
- **82% more likely** than all other companies to have business managers initiate analytical projects, rather than IT
- **Twice as likely** as the Industry Average to automate the delivery of critical business alerts

### Required Actions

In addition to the specific recommendations in Chapter Three of this report, to achieve Best-in-Class performance, companies must:

- Start tracking analytical utilization and engagement
- Establish formal programs to build analytical skills and mindsets
- Examine the potential of search-based BI tools

### Research Benchmark

Aberdeen's Research Benchmarks provide an in-depth and comprehensive look into process, procedure, methodologies, and technologies with best practice identification and actionable recommendations

### How Does Your Performance Compare to the Best-in-Class?



- Compare your processes
- Receive a free, personal PDF scorecard
- Benefit from custom recommendations to improve your performance, based on the research

**Take the Assessment**

Receive Your Free Scorecard

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## Chapter One: Benchmarking the Best-in-Class

### Business Context

Like many of today's most prominent business software platforms, the birthplace of Business Intelligence (BI) was within the IT department. Since the foundation of any fact-based insight is the underlying enterprise data, it stands to reason that the technical leaders with the most knowledge of, and access to that infrastructure would be the very same people that would create the charts, reports, and data views that comprised the early generation of BI. The challenge many companies found, was that the way the data was manipulated and the perspective from which the analysis was performed were typically colored with a technical mindset rather than an eye for business relevance. After all, how could one expect deep expertise in sales, marketing, or finance from an IT manager?

The new paradigm is one that espouses alignment of IT and business through the segregation of responsibility. Rather than spending significant time creating, recreating, and altering charts or dashboards at the behest of a business user, IT leaders can devote their intellectual horsepower to building a more robust information infrastructure, creating linkages to more and different data sources, and ensuring the optimal functionality of the company's technical investments. On the other side, the business users can apply their experience, expertise, and business instinct towards creating better modeling techniques, asking better questions of the data, and generating more meaningful insight. Aberdeen's May 2010 benchmark report, *Self-Service BI: Empowering the Line-of-Business Manager*, demonstrated that Best-in-Class companies were leveraging BI with more business functions and equipping more business users with analytical capability (Figure 1).

#### Fast Facts

Best-in-Class companies achieved:

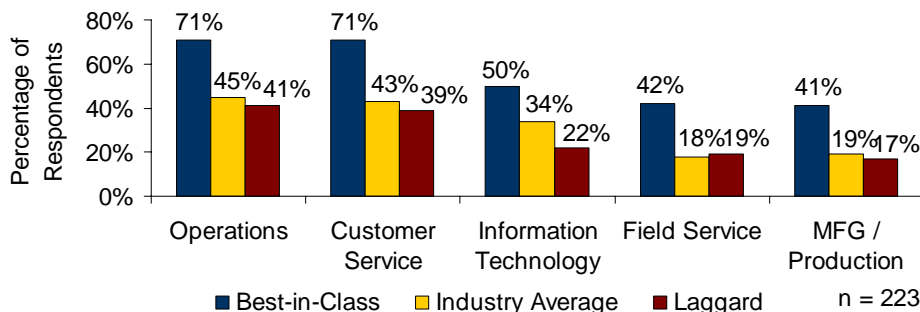
✓ **23%** year over year increase in operating profit

Compared with:

✓ **9%** increase for the Industry Average

✓ **3%** increase for Laggards

**Figure 1: Organizational Functions Leveraging BI - Last Year**



Source: Aberdeen Group, May 2010

Despite the promise of a self-service analytical environment, the ability to equip more non-technical users with BI tools and frameworks is not a challenge-free proposition. Many business users still need convincing when it

comes to the business value of analytics. According to Aberdeen's April benchmark report, *Agile BI: Three Steps to Analytic Heaven*, the top barrier to BI within surveyed organizations was the difficulty of quantifying a tangible ROI from deployment. Best-in-Class companies have a measured approach to business analytics that enables them to deliver analytical capability more deeply within their base of business users, thus paving the way for improved business performance, and a higher return on BI investment as a result.

Domain expertise and strong experience within a particular business area are, and will always be crucial aspects of the decision making process for business leaders. However, when decisions are made solely on "gut feel" and without a shred of relevant supporting information, the outcome of these decisions can be problematic for an organization. Closely tied into this concept, many business decision makers today are looking for an intuitive means of augmenting that experience with relevant decision support capability. This influx of managers requiring decision support, coupled with the need to move away from gut-feel decisions are the two most prominent pressures driving business analytics today (Figure 2).

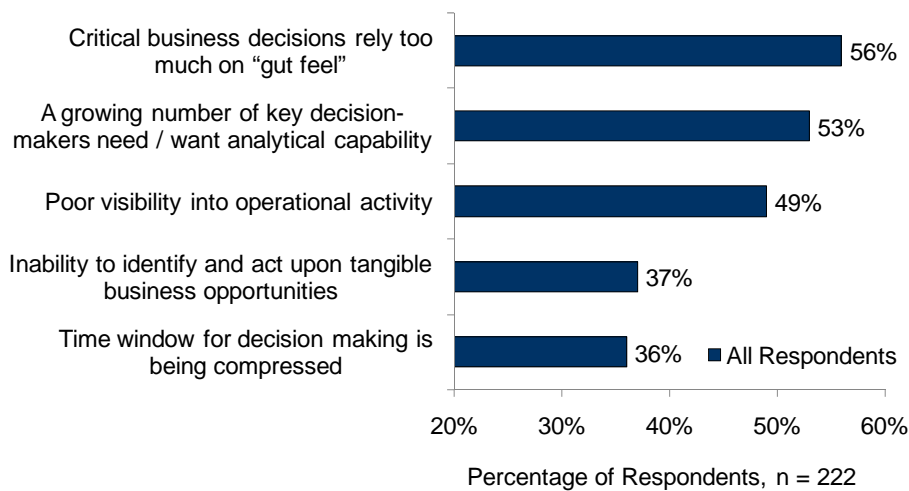
"Business analytics helps to find marketing benefits. It helps you to position better, identify customers, and give clients better value propositions." -

~ Keith Holdt

Head of Global Sales

Swiss Post Solutions

**Figure 2: Top Pressures Driving Business Analytics**



\* Survey respondents were asked to choose two top pressures  
Source: Aberdeen Group, June 2011

Other visible pressures in the world of analytics relate to a growing urgency around the timing of actionable information as well as a need to leverage employee mind power to identify and exploit opportunities for business improvement. Managers these days feel as though salient opportunities for business growth or efficiency improvements are slipping through their fingers without the tools they need to help them identify those opportunities. To add to the frustration, the time frame required to find and act upon those opportunities, the "decision window," so to speak, is becoming smaller for many organizations. In response to these pressures, line-of-business managers across a variety of industries and job roles are turning to the promise of fact-based decision support of business analytics.

## The Maturity Class Framework

The impact of efficient business analytics can be felt in many areas of the organization, some effects intangible, and others more directly measurable. Aberdeen used three key performance criteria to distinguish the Best-in-Class from Industry Average and Laggard organizations:

- **Business growth** is measured as an average year over year change in organic (non acquisition/divestiture related) revenue
- **Quality of decision support** is measured as the average percentage of respondents reporting key aspects of their decision environment as “good” or “very high” quality. Elements of the decision environment used for this metric were:
  - Relevance of information to job role or function
  - Ease of use of information systems
  - Cleanliness / reliability of information
- **Timeliness of information** is measured as an average percentage of critical information delivered on-time or within the pre-defined “decision window”

### Fast Facts

√ **55%** of employees who have a need or desire for analytical capability have access to BI at Best-in-Class companies

Compared with:

√ **46%** of employees at Industry Average companies

√ **31%** of employees at Laggard organizations

**Table 1: Top Performers Earn Best-in-Class Status**

Definition of Maturity Class	Mean Class Performance
<b>Best-in-Class: Top 20%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ <b>27%</b> year over year growth in organic revenue</li> <li>▪ <b>95%</b> of respondents rate their decision support environment as “good” or “very high” quality</li> <li>▪ <b>94%</b> of critical information is delivered on-time</li> </ul>
<b>Industry Average: Middle 50%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ <b>12%</b> year over year growth in organic revenue</li> <li>▪ <b>68%</b> of respondents rate their decision support environment as “good” or “very high” quality</li> <li>▪ <b>77%</b> of critical information is delivered on-time</li> </ul>
<b>Laggard: Bottom 30%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ <b>1%</b> year over year growth in organic revenue</li> <li>▪ <b>26%</b> of respondents rate their decision support environment as “good” or “very high” quality</li> <li>▪ <b>41%</b> of critical information is delivered on-time</li> </ul>

Source: Aberdeen Group, June 2011

## The Best-in-Class PACE Model

Leveraging business analytics to bring faster and more usable insights to line-of-business managers requires a combination of strategic actions, organizational capabilities, and enabling technologies that can be summarized as shown in Table 2.

**Table 2: The Best-in-Class PACE Framework**

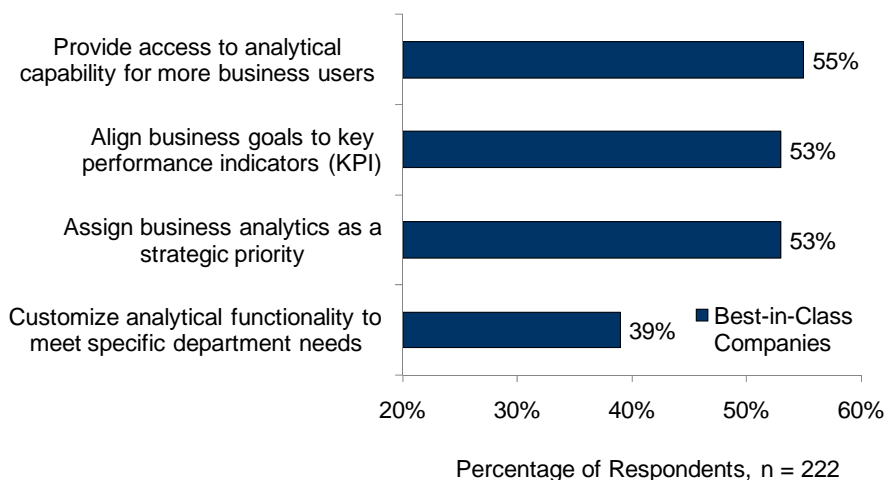
Pressures	Actions	Capabilities	Enablers
<ul style="list-style-type: none"> <li>Critical business decisions rely too much on “gut feel”</li> </ul>	<ul style="list-style-type: none"> <li>Provide access to analytical capability for more users in the organization</li> <li>Assign business analytics as a strategic priority</li> </ul>	<ul style="list-style-type: none"> <li>Regular review/update of Line-of-Business (LoB) performance metrics</li> <li>Executive level sponsor or champion for business analytics</li> <li>Line-of-Business KPIs are well understood and clearly map to the company strategy</li> <li>The adoption/utilization rate of analytical tools is consistently tracked</li> </ul>	<ul style="list-style-type: none"> <li>Dashboard visualization of key metrics</li> <li>Operational BI (real or near-real time) reporting and analysis tools</li> <li>Scorecards</li> <li>Automated alert reporting</li> <li>Predictive analytics</li> <li>Data cleansing technology</li> </ul>

Source: Aberdeen Group, June 2011

### Best-in-Class Strategies

At a strategic level, Best-in-Class companies have prioritized three main activities that help them magnify the impact of business analytics and deliver more value to their organizations. At the top of the list is the ever present push for a higher degree of pervasiveness with analytics. More users want analytical capability, and Best-in-Class companies are giving it to them. From a performance perspective, companies often struggle to execute on the strategic vision of the company because the operational objectives don't support those high level strategic goals. Best-in-Class companies see this alignment of strategic objectives to operational metrics as a top priority (Figure 3).

**Figure 3: Best-in-Class Actions for Effective Business Analytics**



\* Survey respondents were asked to choose two top actions  
 Source: Aberdeen Group, June 2011

Another key priority for Best-in-Class companies is delivering an analytic solution tailored to the needs of specific departments in order to better

meet the needs of their end users. Given the wide disparity of expertise, performance requirements, and data idiosyncrasies across business functions, the need to adjust analytical capabilities to better fit into those requirements becomes more prominent. Best-in-Class companies see achieving this level of customization or analytical "fit" as a major strategic priority.

"For our industry (Entertainment), there is not an appetite for metrics. Most decisions are made based on politics. The long term success of our organization will depend in part on our ability to become more sophisticated and data-driven."

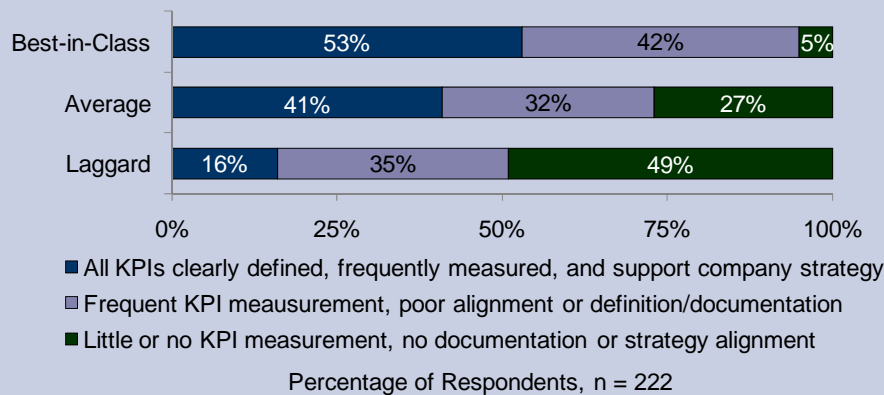
~ HR Director

Large Entertainment Organization

### Aberdeen Insights — Strategy

Measuring, managing, and improving Key Performance Indicators (KPIs) have long been a vital underpinning of a Best-in-Class analytical strategy. However, the simple act of measuring a high-level metric is often-times insufficient towards achieving the strategic goals of an organization. There is demonstrable value in not only identifying performance metrics on a functional level, but clearly documenting those metrics, consistently measuring them, and frequently revising those metrics to make sure they align with and support the overarching strategic objectives of the company. Best-in-Class companies are far more likely to have a significant degree of maturity when it comes to measuring KPIs at a departmental or line-of-business level (Figure 4).

**Figure 4: How Mature Is Your Department's KPI Structure?**



Source: Aberdeen Group, June 2011

The most effective organizations continually assess and reevaluate their strategic priorities. Before the collapse of the financial markets in 2008, many companies were looking to ride the wave of economic growth of that era and therefore revenue and customer growth were the top strategic priorities. After the Wall Street collapse, the tightening of credit, and the skepticism of the marketplace all kicked in, most organizations had realigned their priorities to emphasize cost-cutting and efficiency. By varying their activity and, by extension, the metrics they adhere to, most business functions have the opportunity to impact either the growth or efficiency budget.

*continued*

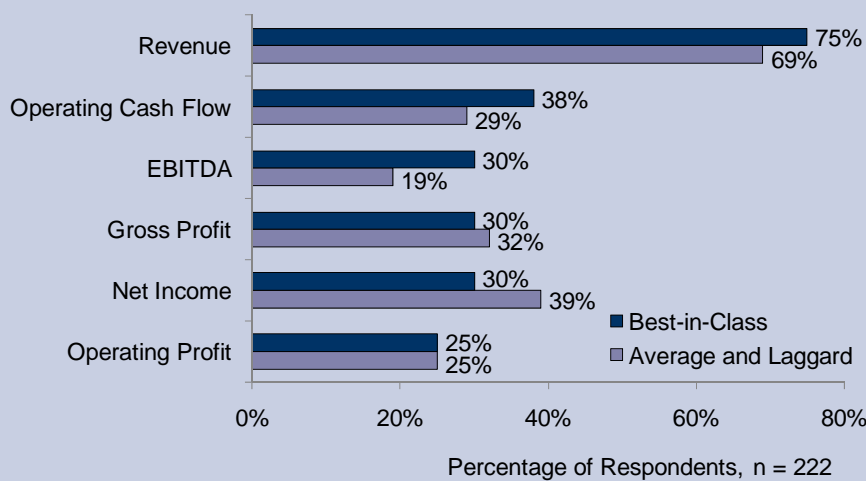


**Aberdeen Insights — Strategy**

However, the problem many organizations face is poor alignment between those high-level strategic objectives and the metrics that matter on a departmental or functional level. Best-in-Class companies are fiercely adherent to a well defined, clearly communicated, and frequently assessed structure of KPIs, allowing them to create more tangible business value as a result.

What constitutes performance however, is often quite different across companies. Survey respondents were asked to report, for their particular business function, which metrics matter the most or are most indicative of business performance. Not surprisingly, at the top of the list for all companies is the need for revenue growth. From an efficiency standpoint however, Best-in-Class companies see a greater need to improve cash flow than any other metric (Figure 5).

**Figure 5: Key Metrics Most Indicative of Business Performance**



Source: Aberdeen Group, June 2011

This data reveals a noticeable degree of pragmatism in Best-in-Class companies. Profitability - at any level of the P&L statement - is a crucial way of measuring performance, but has limitations in terms of its realistic and immediate impact to the company. You can't pay employees or purchase supplies with *profit* in its strictest sense. Best-in-Class companies recognize that cash flow is the lifeblood of any organization, and next to revenue, this metric is the most crucial to measure, manage, and improve.

In the next chapter, we will see what the top performers are doing to achieve these gains.

## Chapter Two: Benchmarking Requirements for Success

The selection of a business analytics solution and its integration with key operational management systems plays a crucial role in the ability to turn these strategies into profit. The following case study illustrates how one line-of-business manager was able to harness the power of to support better decisions and create tangible business value.

### Case Study — Tata Steel

Tata Steel is one of the top ten global steel companies in the world. Founded in 1907, the company now has production facilities across the world in 26 countries as well as operations in over 50 countries. In such a large enterprise, there are many times where employees do not feel they have accurate data to make decisions even though they are closest to what is actually going on in the business. Of course, making informed decisions requires visibility to all available relevant data. As such, Nick Reeks, Director of Procurement Development for Tata Steel Group, knows the importance of data when he and his colleagues are making decisions.

Before the implementation of their BI solution, there were several pressures facing the employees in Tata Steel's procurement department. The data that was available to them was not consistent, there were often duplicates, and employees didn't have access to the tools and data that would allow them to perform better. Many opportunities were missed. It was very difficult to do data analysis. Reeks said, "We had people requesting reports, and then getting a report 3 weeks later and thinking 'Why did I ask for that?'" Buyers were not able to act on good opportunities because they didn't have accurate data and could not plan accordingly. This all changed after the company implemented a BI tool and provided access to the tool to employees on the line of business.

"BI liberalized us," said Reeks, "Most of its effectiveness was on the behaviors of users." The company used this platform to implement a "global spend visibility project," making BI the reporting tool of choice. There was a drive to raise the importance of master data and analytics in the organization. Although people were wary of the reporting tools at first, the company made it a point to train as many employees as possible on how to use the tool. The company is stressing the importance of data. Rather than have 28 specific reports as in the past, the company now has one report featuring everything that employees need that can be sliced and diced to fit the needs of every individual user. Reeks said, "We are looking to deliver \$200 million in benefits and can't sustain that without looking from new angles. This data allows us to speed up the process of looking for opportunities." The data also allows them to see who has the most influence on the changing data. It has allowed the company to become more agile, plan better, and take advantage of any opportunities. By providing as many people in the company as possible with data, Tata Steel is enabling itself to avoid the pitfalls that a large, small moving company can fall in to.

### Fast Facts

Best-in-Class companies achieved:

√ **21%** year over year increase in operating cash flow

Compared with:

√ **8%** increase for the Industry Average

√ **1%** increase for Laggards

## Competitive Assessment

Aberdeen Group analyzed the aggregated metrics of surveyed companies to determine whether their performance ranked as Best-in-Class, Industry Average, or Laggard. In addition to having common performance levels, each class also shared characteristics in five key categories: (1) **process** (the approaches they take to execute daily operations); (2) **organization** (corporate focus and collaboration among stakeholders); (3) **knowledge management** (contextualizing data and exposing it to key stakeholders); (4) **technology** (the selection of the appropriate tools and the effective deployment of those tools); and (5) **performance management** (the ability of the organization to measure its results to improve its business). These characteristics (identified in Table 3) serve as a guideline for best practices, and correlate directly with Best-in-Class performance.

**Table 3: The Competitive Framework**

	Best-in-Class	Average	Laggards
<b>Process</b>	Regular review/update of Line-of-Business (LoB) performance metrics		
	68%	51%	32%
	Process for defining and communicating business needs for analytics		
	65%	55%	25%
<b>Organization</b>	Executive level sponsor or champion for business analytics		
	83%	67%	35%
	Analytical projects are initiated by the Line-of-Business		
	73%	53%	38%
<b>Knowledge</b>	Line-of-Business KPIs are well understood and clearly map to the company strategy		
	74%	43%	22%
	Active encouragement and technological support for exchanging data across organizational silos		
	55%	38%	16%
<b>Performance</b>	The adoption/utilization rate of analytical tools is consistently tracked		
	54%	28%	5%
	Consistent measurement of LoB performance metrics to inform strategic objectives		
	53%	37%	20%
<b>Technology</b>	Dashboard visualization of key metrics		
	82%	55%	40%
	Operational BI (real or near-real time) reporting and analysis tools		
	68%	46%	35%
	Scorecards		
	64%	53%	40%
Automated alert reporting tools			
	64%	32%	18%

"We need to be able to do analysis of data aggregated from a multitude of sources. We need to be able to better understand what we're doing or what we should be doing. We plan to make this analysis available to everyone in the company because the better informed they are, the better jobs they are going to do."

~ Ben Sommerville

Chief Operating Officer

Phoenix Logistics

Source: Aberdeen Group, June 2011

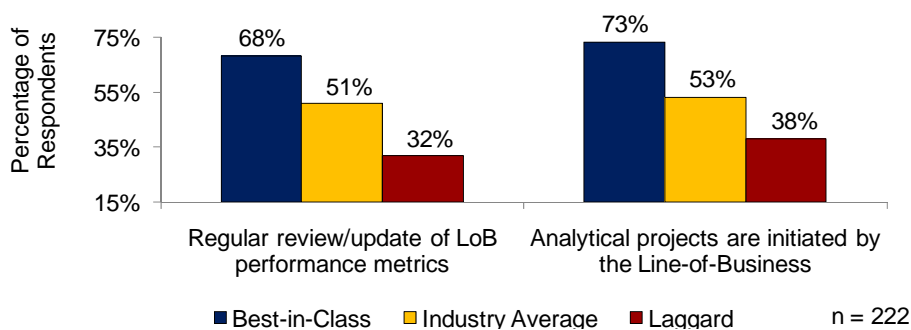
## Capabilities and Enablers

Based on the findings of the Competitive Framework and interviews with end-users, Aberdeen’s analysis of the Best-in-Class demonstrates that the success of a business analytics strategy depends on a combination of specific capabilities and technology enablers. Aberdeen’s research has identified several capabilities that Best-in-Class companies leverage in order to achieve elevated performance.

### Process

Most organizations contain a variety of different user types when it comes to business analytics. Dedicated business analysts and power users typically have the highest performance requirements when it comes to data volume, access and latency of information delivery, whereas line-of-business executives generally need more intuitive and appealing views and greater ease-of-use. The Best-in-Class recognize the variance of needs when it comes to their user base and are 2.6-times more likely than Laggards to have an established process for defining and gathering end user needs for business analytics. Additionally from a process standpoint, top performers are also more likely to continually refresh the functional-level performance metrics they measure and manage to. The data in Figure 4 demonstrated how the Best-in-Class are more likely to have a strong hierarchy of KPIs that drive their organization from top to bottom. This philosophy starts at the departmental level, and top performing companies are more than twice as likely to continually assess and refine their LoB performance metrics to ensure alignment with the company strategy (Figure 6).

**Figure 6: Process and Organizational Capabilities**



Source: Aberdeen Group, June 2011

### Fast Facts

✓ **51%** of BI users at Best-in-Class companies are actively engaged in business analytics on a weekly or more frequent basis

Compared with:

✓ **38%** of BI users at Industry Average companies

✓ **24%** of BI users at Laggard organizations

### Organization

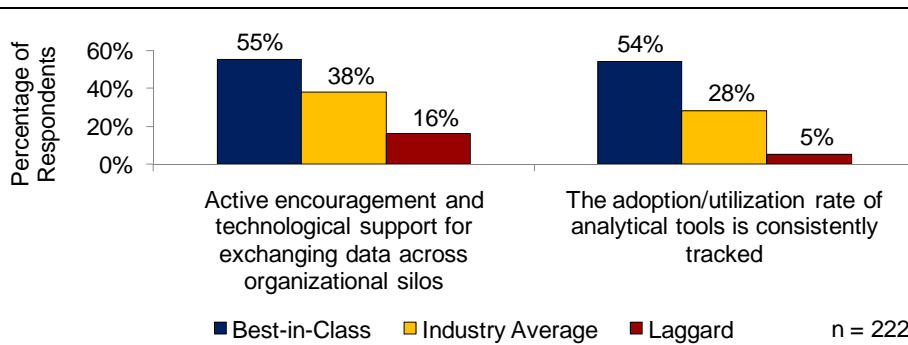
From a business standpoint, there are two types of stakeholder that can make or break the efficacy of a business analytics strategy. On the front lines, the departmental managers hold the key to extracting the value of analytics by applying the tools and methodologies to their particular business area, in order to create tangible performance improvements. In that sense, the urgency and the initiation needs to come from those very functional leaders. Best-in-Class companies are more likely to initiate

analytical projects from within the lines-of-business themselves, rather than having them forced on the organization from IT or the executive level (Figure 6). The other key stakeholder involved in the success of business analytics is senior management. Without support and/or engagement from the executive ranks, analytical projects risk failure due to lack of adoption or poor alignment between functionality and user needs. Top performers recognize the imperative of having support from senior management, and are 67% more likely than all other companies to have an executive level sponsor or champion for business analytics.

### Knowledge Management

When it comes to clearly defining and sharing key concepts across the organization, Best-in-Class companies are ahead of the pack once again. In order to generate the type of KPI hierarchy discussed at the end of the previous chapter, there needs to be a strong foundation of communication and sharing across functions. Back office metrics like inventory turnover or receivable days outstanding have implications that stretch into finance, sales, marketing and other departments within the organization. The Best-in-Class are more than twice as likely as all other companies to have well defined and clearly communicated LoB performance metrics in place that map appropriately to the overall company strategy. In order to get to this point however, an organization needs to reduce the impediments to effective cross-functional collaboration. Through the creation of the right processes and the use of supporting technologies, Best-in-Class companies are enabling effective communication from one business function to another (Figure 7).

**Figure 7: Knowledge and Performance Management Capabilities**



Source: Aberdeen Group, June 2011

#### Fast Facts

- ✓ **33%** of Best-in-Class companies have integrated social media tools into their analytical environments
- Compared with:
- ✓ **13%** of Industry Average companies
- ✓ **12%** of Laggards

### Performance Management

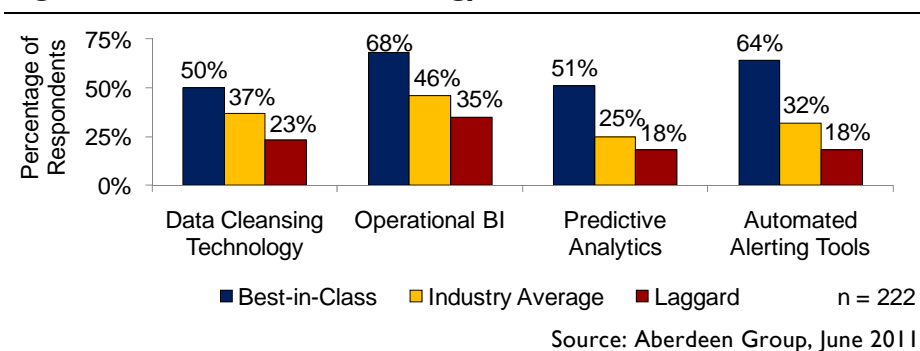
Aberdeen research consistently demonstrates a linkage between strong analytical adoption and return on analytical investment. However obvious it may seem, the fact is that if analytical solutions aren't used, they can't deliver value to the organization, and "shelfware" remains a significant problem for too many companies. The ability to achieve a high level of adoption and engagement in analytical tools is predicated on the ability to measure that

very adoption or utilization rate. Aberdeen research demonstrates that Best-in-Class companies are 10-times more likely than Laggards to consistently track the utilization of analytical tools (Figure 7). Additionally from a performance management perspective Best-in-Class companies understand the two-way street that is KPI alignment. This report repeatedly discusses the concept of aligning departmental metrics to strategic objectives, but this process goes both ways. The business drivers that matter on a functional level can and should have an impact on the way the organization adjusts its long-term strategy. Best-in-Class companies are 43% more likely than the Industry Average to measure LoB performance metrics for the purpose of informing and adjusting the organization's strategic objectives.

### Technology

The umbrella of business analytics extends throughout the information value chain. In other words from a process and a technology perspective, analytical activity includes anything involved with the collection and improvement of data, through the analysis, modeling, and delivery of actionable insight. Transforming that raw data into usable business insight is where technology can play a crucial role, and Best-in-Class companies are more likely to lean on the right technologies in each of these areas. Data cleansing technology enables organizations to improve the value of their growing volumes of information by reducing corrupted data, duplications, and omissions, such that the analysis won't be hindered by quality issues. Additionally, in order to capture that data in a timely manner and perform analysis within the compressed decision window, Best-in-Class companies are also more likely to leverage operational BI tools for real or near real-time data capture and analysis (Figure 8).

**Figure 8: Best-in-Class Technology Enablers**



"We have had a modest data warehouse for years, but the need for more complete customer information on behaviours, product penetration, revenue leakage and profitability and new business opportunities has never been greater."

~ Marketing Director  
 Large Global Banking Organization

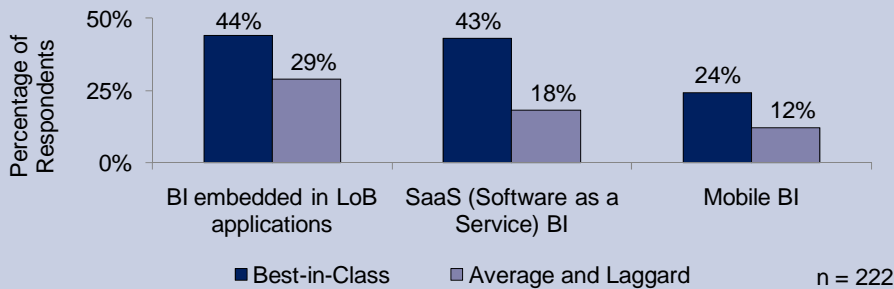
With cleaner and more timely data in their analytical pipeline, Best-in-Class companies are also leveraging technology to ask more proactive questions of their business and better understand the impact of anticipated changes through the use of predictive analytics technology. Additionally, Best-in-Class companies are more than twice as likely as the Industry Average to use automated alert reporting tools to deliver crucial insights to decision

makers within their required time frame, allowing them to better anticipate and react to threats and opportunities within their business function.

**Aberdeen Insights — Technology**

In lock step with the rest of the technology world, the landscape of BI and analytical technology is evolving rapidly to meet the needs of the changing workforce. In order to deliver meaningful analytical capabilities to a broader set of business users, companies are exploring new delivery media for BI. With an expanding base of remote and un-tethered employees, deployment methods like Software as a Service (SaaS) and mobile BI are finding a home in the infrastructure of Best-in-Class companies more often than Industry Average and Laggard organizations. Perhaps an even more noticeable trend in the world of BI is the concept of embedded analytics. Having already made significant investment in a software infrastructure, and having taken strides to achieve a high level of adoption with those tools, many companies are looking to satisfy their organization's thirst for analytical capability by delivering this functionality as an integrated toolset within their existing software applications such as ERP or CRM. In this particular survey - as well as several prior surveys - the data shows that Best-in-Class companies are more likely than all others to take an embedded approach when delivering analytical capability (Figure 9).

**Figure 9: Alternative BI Delivery Methods**



Source: Aberdeen Group, June 2011

There are a variety of reasons why a company might take this type of embedded approach, but perhaps most noticeable are the reasons pertaining to adoption and engagement. Few things erode the value of enterprise software faster or more visibly than a lack of interest in the tools. When an organization invests money, time, and resources (both IT and business) in the distribution of software, it behooves that organization to take action to ensure the long term viability and utilization of those technologies.

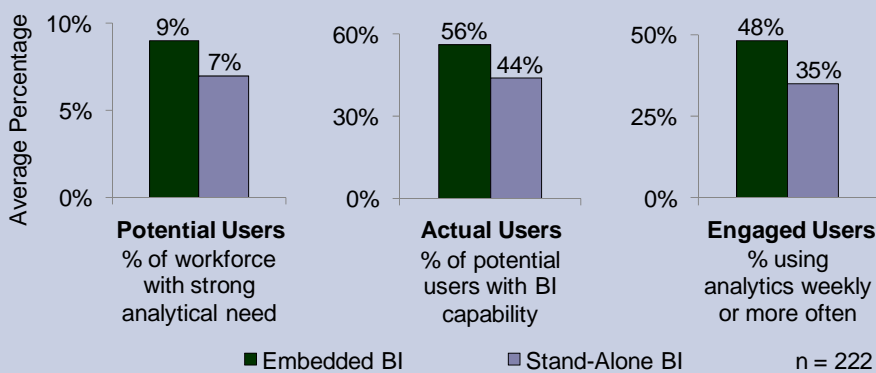
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**Aberdeen Insights — Technology**

**Aberdeen Insights — Technology**

Companies who consider an embedded approach are typically those who have made such efforts. As a side effect of their existing software deployments, embedded BI users typically have more employees that - through the use of their own business applications - have discovered a need or a desire for analytical capability. The research bolsters this concept in revealing that embedded BI users have a larger potential analytical user base than those taking a stand-alone approach to BI (Figure 10).

**Figure 10: Adoption and Engagement with "Embedded BI"**



Source: Aberdeen Group, June 2011

Where the rubber meets the road for embedded BI users however is in achieving the aforementioned adoption and engagement in their analytical solutions. The research shows that embedded BI users, by "piggy backing" analytical capability on top of existing deployed software tools, are arming a larger percentage of their potential user base with BI capability.

Additionally, by delivering this functionality within the same familiar platform as their existing line-of-business applications, embedded BI users are also enabling a greater degree of engagement in analytics. The research also shows that embedded BI users have a larger percentage of their user base actively engaged in analytical activity on a weekly or more frequent basis (Figure 10).

By taking advantage of their inherent advantages with higher analytical adoption and engagement, embedded BI users are putting their business decision makers in a strong position to extract the maximum value from business analytics and deliver substantial performance enhancements as a result.



## Chapter Three: Required Actions

Whether a company is trying to move its performance in business analytics from Laggard to Industry Average, or Industry Average to Best-in-Class, the following actions will help spur the necessary performance improvements:

### Laggard Steps to Success

- **Start tracking analytical utilization and engagement.** As discussed in the previous chapter, there is an undeniable correlation between analytical adoption and business performance. 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. By putting a process in place to understand who uses the tools and how often, Laggards will be in a better position not only to refine and improve their analytical offerings, but to impact overall business performance in a more meaningful way.
- **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. Only 13% of Laggards have programs in place to train business users and build analytical mindset from within the organization, compared with 53% of Best-in-Class companies. Through the creation of training programs and educational processes, Laggards can work to build a broader culture of analytics in those lacking, and nurture the analytical mindset in those who already have it, ultimately magnifying the impact of business analytics within their organizations.
- **Automate the delivery of key business alerts.** There is a fairly wide variance in the urgency of certain performance metrics compared with others. Strategic information might be delivered in a monthly or quarterly report. However, operational performance metrics that have a more immediate effect on how the business is performing right now require a much tighter delivery time frame. Best-in-Class companies are 3.6-times more likely than Laggards to automate the delivery of alerts based on changes in these operational performance metrics, allowing them to react quicker to threats and opportunities. Laggards can take a cue from the Best-in-Class by leveraging technology to deliver faster business insights to their key operational decision makers.

#### Fast Facts

✓ **82%** of Best-in-Class companies report having self-service, or minimally assisted access to analytical capability

Compared with:

✓ **74%** of Industry Average companies

✓ **55%** of Laggards

### How Does Your Performance Compare to the Best-in-Class?



- Compare your processes
- Receive a free, personal PDF scorecard
- Benefit from custom recommendations to improve your performance, based on the research

[Take the Assessment](#)

Receive Your Free Scorecard

## Industry Average Steps to Success

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- **Improve understanding of end-user satisfaction.** The quality of a business decision has many facets. The relevance, timeliness, and cleanliness of data, the flexibility of access to information, and the ease-of-use of information systems, and the experience of the decision maker, are all factors that contribute to decision confidence. In order to achieve high decision quality, Best-in-Class companies not only deliver analytical tools that are more meaningful to their users, but they also consistently take the pulse of the user community. The research shows that top performers are 2.2-times more likely than the Industry Average to measure and improve end-user satisfaction with analytical tools. Increasing the focus on user satisfaction will help average performers improve adoption and engagement in analytics and maximize the business impact delivered by those business users.
- **Dedicate cross-functional teams to broaden the impact of business analytics.** Aberdeen's research shows that not only have top performers delivered BI to more organizational functions, but they have achieved a deeper and more impactful deployment within each of those functions (Figure 11). A major reason they have been able to achieve this pervasiveness is their focus on creating a collaborative atmosphere that promotes the exchange of best-practices across departments when it comes to analytics. Aspects of report creation, dashboard views, data linkages, and other elements of the BI value chain can be applied in finance just as well as they can in marketing, sales, or human resources. Best-in-Class companies are 35% more likely than Industry Average companies to have cross-functional teams dedicated to the expansion of business analytics across the organization. Using these types of cross-functional teams will enable Industry Average organizations to achieve a higher degree of analytical pervasiveness in their organization and boost their return on BI investment.
- **Consider deploying predictive analytics technology.** As the volume of enterprise data balloons across the business landscape, companies are struggling to maintain pace with their understanding of that data. Data moves faster, decisions are made faster, and the competitive landscape transforms more quickly. In the face of such a rapidly changing marketplace, organizations are continuously looking for ways to reduce their reliance on only historic data to inform decisions. These days, top performing companies are becoming more predictive than reactive when it comes to understanding their organization and how its long-term stability will be affected by the changing landscape. To assist in this process, Best-in-Class companies are 1.9-times more likely than the Industry Average to utilize predictive analytics technology. Leveraging the "what-if" scenario building and predictive modeling capabilities these solutions offer, Industry Average companies will be in a more advantageous

"In addition to BI, there is a need for dashboarding of the BI so that senior executives can, at a glance, know from a high level if things are "on target" in specific functions/cost centres."

~ SVP, Sales

Mid-Sized North American  
Technology Company

position to compete and thrive in today's fast-paced business climate.

## Best-in-Class Steps to Success

- **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 top performers are sharing data and collaborating across internal business functions, only 30% report having that same level of cooperation with external stakeholders. Best-in-Class companies could benefit from becoming more externally collaborative, delivering analytical views and sharing analytical concepts with stakeholders outside of their organizations.
- **Improve the understanding of the business and IT impact of analytics.** The focus of this particular study is squarely on the business user, and as such, Best-in-Class companies shine when it comes to understanding their end-users and delivering solutions that are user friendly but simultaneously powerful. One area where the Best-in-Class fall short however, is in balancing their visibility into the business impact with their understanding of how it impacts the technical leaders and IT infrastructure of the organization. The research shows that less than half of Best-in-Class companies have the ability to measure IT resource utilization related to business analytics. The value of self-service analytics has a direct relationship with the business end-users and an indirect impact on IT. Relieving the burden of repetitive report generation, chart updating, and other relatively mundane activities from the technical team, frees up those valuable resources to apply toward other, more mission-critical areas of the business. Gaining visibility into that IT resource utilization will further boost the impact of their analytical strategy and lead to a higher ROI as a result.
- **Examine search-based BI tools.** This report emphasizes the concept that extracting business value from an analytical strategy is heavily tied to the adoption of the tools and methods. Ease-of-use and familiarity are two factors that can substantially contribute to this level of adoption. Aside from perhaps spreadsheet manipulation of data, it could be argued that the most familiar and well established form of analytics is enterprise search-based activity. The marriage of business analytics concepts and toolsets with search based capability is a powerful way of quickly arming business users with effective decision support, yet the research shows that only 44% of Best-in-Class companies are leveraging search-based BI tools. The addition of this type of functionality to the Best-in-Class

### Fast Facts

√ **14%** of survey respondents are using Mobile BI

Those respondents are mobilizing BI on the following devices:

√ **77%** are using smartphones

√ **43%** are using tablets

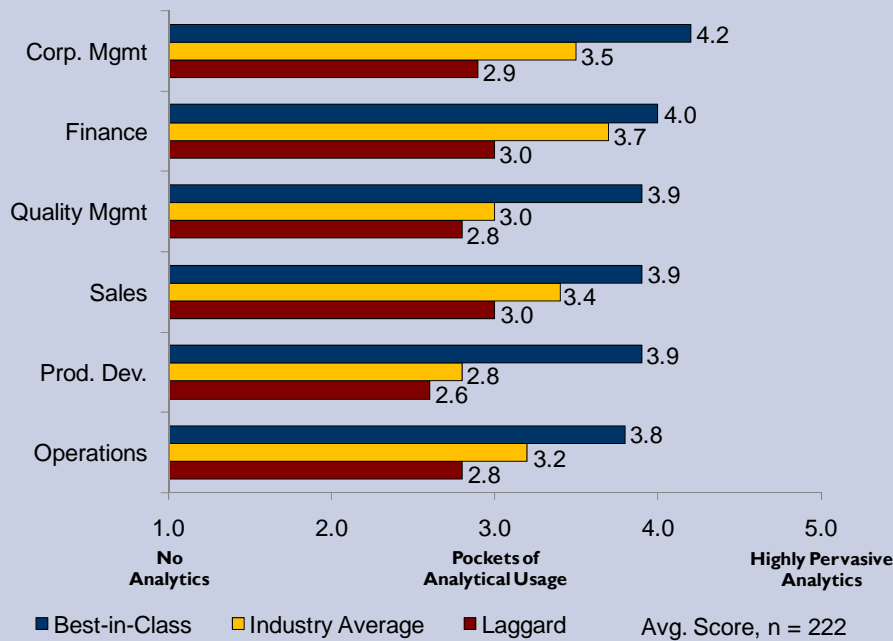
√ **32%** are using netbooks

analytical portfolio will help sustain their superior degree of analytical adoption and continue to support the expansion of business analytics across the organization.

**Aberdeen Insights — Summary**

The engagement and depth of business analytics is clearly variable depending on the business function in question. Wherever the launching point of BI was in a particular company - finance, sales, or marketing for example - is typically where the greatest analytical activity takes place. In addition to the broad-base understanding of adoption and engagement shown in Figure 10, the survey also captured information about the relative pervasiveness of analytics within each function itself, on a scale of 1 to 5. The data revealed that Best-in-Class companies report a greater degree of analytical pervasiveness in each relevant business function (Figure 11).

**Figure 11: Best-in-Class Deliver More Pervasive Analytics**



Source: Aberdeen Group, June 2011

With a solid understanding of their user base, a mature and tiered system of KPI measurement, and a well tailored set of intuitive solutions, Best-in-Class companies have been able to deliver analytical firepower to more business users in the organization. This level of analytical pervasiveness is the key underpinning in a Best-in-Class philosophy and is instrumental in delivering top-notch business performance improvements.

## Appendix A: Research Methodology

Between May and June 2011, Aberdeen examined the use, the experiences, and the intentions of 222 executives using BI in a diverse set of organizations.

Aberdeen supplemented this online survey effort with interviews with select survey respondents, gathering additional information on BI strategies, experiences, and results.

Responding enterprises included the following:

- *Job title:* The research sample included respondents with the following job titles: C-Level (19%); EVP / SVP / VP (12%); Director (18%); Manager (31%); Consultant (11%); and other (9%).
- *Department / function:* The research sample included respondents from the following departments or functions: sales & marketing (19%); corporate management (19%); IT manager or staff (17%); operations (11%); finance (10%); logistics / procurement (9%); and other (15%).
- *Industry:* The research sample included respondents from a variety of industries. The largest segments represented were high-tech (25%), manufacturing (18%), and logistics (10%).
- *Geography:* The majority of respondents (66%) were from North America. Remaining respondents were from the Asia-Pacific region (10%) and Europe (24%).
- *Company size:* Thirty-five percent (35%) of respondents were from large enterprises (annual revenues above US \$1 billion); 29% were from midsize enterprises (annual revenues between \$50 million and \$1 billion); and 36% of respondents were from small businesses (annual revenues of \$50 million or less).
- *Headcount:* Forty-nine percent (49%) of respondents were from large enterprises (headcount greater than 1,000 employees); 25% were from midsize enterprises (headcount between 100 and 999 employees); and 26% of respondents were from small businesses (headcount between 1 and 99 employees).

### Study Focus

Responding executives completed an online survey that included questions designed to determine the following:

- √ The degree to which BI is deployed in their operations and the financial implications of the technology
- √ The structure and effectiveness of existing BI implementations
- √ Current and planned use of BI to aid operational and promotional activities
- √ The benefits, if any, that have been derived from BI initiatives

The study aimed to identify emerging best practices for BI usage, and to provide a framework by which readers could assess their own management capabilities.

**Table 4: The PACE Framework Key**

Overview
<p>Aberdeen applies a methodology to benchmark research that evaluates the business pressures, actions, capabilities, and enablers (PACE) that indicate corporate behavior in specific business processes. These terms are defined as follows:</p> <p><b>Pressures</b> — external forces that impact an organization’s market position, competitiveness, or business operations (e.g., economic, political and regulatory, technology, changing customer preferences, competitive)</p> <p><b>Actions</b> — the strategic approaches that an organization takes in response to industry pressures (e.g., align the corporate business model to leverage industry opportunities, such as product / service strategy, target markets, financial strategy, go-to-market, and sales strategy)</p> <p><b>Capabilities</b> — the business process competencies required to execute corporate strategy (e.g., skilled people, brand, market positioning, viable products / services, ecosystem partners, financing)</p> <p><b>Enablers</b> — the key functionality of technology solutions required to support the organization’s enabling business practices (e.g., development platform, applications, network connectivity, user interface, training and support, partner interfaces, data cleansing, and management)</p>

Source: Aberdeen Group, June 2011

**Table 5: The Competitive Framework Key**

Overview	
<p>The Aberdeen Competitive Framework defines enterprises as falling into one of the following three levels of practices and performance:</p> <p><b>Best-in-Class (20%)</b> — Practices that are the best currently being employed and are significantly superior to the Industry Average, and result in the top industry performance.</p> <p><b>Industry Average (50%)</b> — Practices that represent the average or norm, and result in average industry performance.</p> <p><b>Laggards (30%)</b> — Practices that are significantly behind the average of the industry, and result in below average performance.</p>	<p>In the following categories:</p> <p><b>Process</b> — What is the scope of process standardization? What is the efficiency and effectiveness of this process?</p> <p><b>Organization</b> — How is your company currently organized to manage and optimize this particular process?</p> <p><b>Knowledge</b> — What visibility do you have into key data and intelligence required to manage this process?</p> <p><b>Technology</b> — What level of automation have you used to support this process? How is this automation integrated and aligned?</p> <p><b>Performance</b> — What do you measure? How frequently? What’s your actual performance?</p>

Source: Aberdeen Group, June 2011

**Table 6: Relationship Between PACE and the Competitive Framework**

PACE and the Competitive Framework – How They Interact
<p>Aberdeen research indicates that companies that identify the most influential pressures and take the most transformational and effective actions are most likely to achieve superior performance. The level of competitive performance that a company achieves is strongly determined by the PACE choices that they make and how well they execute those decisions.</p>

Source: Aberdeen Group, June 2011

## Appendix B: Related Aberdeen Research

Related Aberdeen research that forms a companion or reference to this report includes:

- [\*Business Intelligence on the TCO Diet: Slashing the Cost of Insight with Analytical Fitness\*](#); May 2011
- [\*Public Sector Analytics: Optimizing Resource Usage with Data-Driven Decisions\*](#); April 2011
- [\*Business Answers at Your Fingertips: The Real-Time Value of BI\*](#); April 2011
- [\*The ABCs of Executive Analytics: A-List Performance Using BI in the C-Suite\*](#); March 2011
- [\*Data Management for BI: Fueling the Analytical Engine with High-Octane Information\*](#); December 2010
- [\*BI for the SMB 2010: Unlocking Hidden Business Insight to Drive Profit\*](#); October 2010
- [\*Operational Intelligence: Boosting Performance with "Right-Time" Business Insight\*](#); August 2010
- [\*Self-Service BI: Empowering the Line-of-Business Manager\*](#); May 2010
- [\*The Intelligent Insurer: Enhanced Business Performance with Pervasive Analytics\*](#); May 2010

Information on these and any other Aberdeen publications can be found at [www.aberdeen.com](http://www.aberdeen.com).

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