Operational Intelligence

Boosting Performance with "Right-Time" Business Insight

August 2010

Michael Lock

Executive Summary

The quality of day-to-day tactical decision making can make or break a company in today's fast-paced business climate. What separates leaders from laggards is the ability to generate timely, clean, and relevant business insight to support operational decisions, rather than simply relying on "gut-feel." Best-in-Class organizations deftly manage an influx of raw transactional data, contextualize and transform it into usable business insight, and deliver that insight to their key decision makers within the time-frame required to make mission-critical operational decisions. Through an efficient combination of internal capability and utilizing appropriate Business Intelligence (BI) and decision support technologies, Best-in-Class companies are able to achieve superior performance in sales management, customer service, and financial efficiency. This report is based on feedback from 260 end-user organizations globally.

Best-in-Class Performance

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

- **93%** of information, on average, is delivered in "right-time," compared with 72% for the Industry Average, and 32% for Laggards

- **17%** year over year increase in financial operating performance, compared with 7% for the Industry Average and a 1% decrease for Laggards

- **29%** year over year increase in sales pipeline performance, compared with 12% for the Industry Average and 2% for Laggards

- **94%** current customer service score, compared with 88% for the Industry Average, and 74% for Laggards

Competitive Maturity Assessment

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

- **2.1-times more likely** to share operational data across functions
- **2.3-times more likely** to coach/develop analytical talent in-house
- **3.4-times more likely** to use a dedicated operational BI platform

Required Actions

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

- Adopt a continuous process to identify operational KPIs
- Improve the ability to share and exchange data across operational silos
- Seek ways to automate data integration and cleansing

"The focus is always on how best to respond to our customers. Operational intelligence provides us with the ability to respond to almost any customer inquiry. It is important that your KPI's match what really drives the business and not what was traditionally measured."

~ Logistics Manager

Large U.S. Computer Equipment Manufacturer

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The Rising Need for Operational Intelligence

The typical organization struggles mightily to deliver actionable information to its workforce in time to make business-critical decisions. In order to capitalize on short-term opportunities, companies need insight at their fingertips as changes occur, and many are looking to Business Intelligence (BI) to help address these challenges. Aberdeen's May 2010 benchmark report, *Self-Service BI: Empowering the Line-of-Business Manager*, demonstrated that 45% of companies view the need for faster access to relevant data as the primary driver behind a BI initiative. To improve transactional information flow and deliver real time, or "right-time" business insight, companies are now leveraging tactical day-to-day analytical strategies in order to generate a substantial improvement in operational metrics such as operating profit, sales pipeline growth, and customer satisfaction.

The challenge many organizations face as they look to improve these key metrics is a shortage of timely information, causing decision makers to rely on incomplete, irrelevant, or flawed data to drive their daily operations. Few would dispute the importance of providing visibility to critical business information for managers and knowledge workers when and how they need it. Traditional BI tools were designed specifically to deliver a view into information and analysis of 'what happened' over time in order to improve long-term strategy. However, as the speed of business has increased, many companies struggle to maintain a close eye on the day-to-day activities and maintain operational efficiency. Aberdeen's December 2009 benchmark report, *Data Management for BI*, confirms the increasing urgency for faster information delivery as companies report their required access time, or their specific "right-time" (Figure 1).
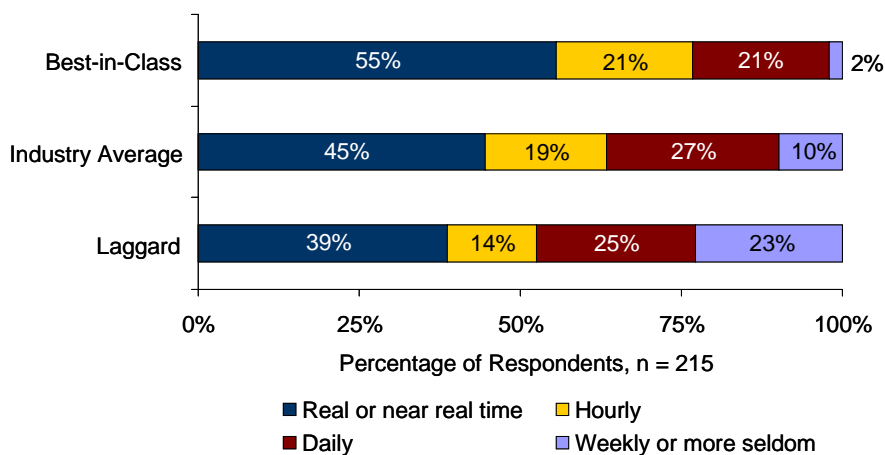
Fast Facts

Best-in-Class companies achieved:

√ **16%** year over year increase in operating profit/EBIT

Compared with

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

√ **1%** *decrease* for Laggards

Figure 1: Required Availability of Actionable Information

Source: Aberdeen Group, December 2009
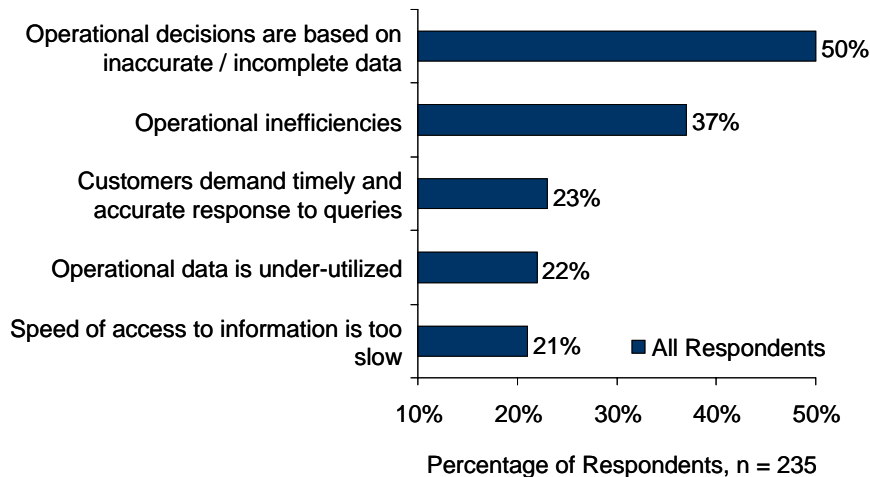
Business Context

The past few business cycles have seen a rise in the need for better operational visibility that can provide decision support for day-to-day activity. In light of the new business paradigms that emphasize leaner operations and heightened customer responsiveness, companies seek tools and methodologies that can provide them with quick answers to their business questions without requiring intrusive and time-consuming support from IT staff.

The advantages to this type of tactical visibility are multifaceted and offer numerous opportunities to improve operational performance. From the end-user's perspective, the benefits of tactical visibility are tied to the ability to make quicker and more informed decisions, enabling the business to:

- Improve operational efficiency
- Optimize the sales pipeline
- Enhance customer satisfaction
- Drive profitability

Often times however, the potential business benefits aren't enough to convince an organization to adopt a strategy for tactical or operational BI. More often than not, internal and external pain points are the most instrumental in compelling a company to focus efforts on improving operations through analytical strategy. In this case, Aberdeen's research shows that a marked lack of accurate and usable operational data is the top pressure forcing companies in this direction (Figure 2).

"Data needs to be accurate at the source and tactical decision aligned as close to the data source as possible. Stores must be able to have certain decisions that get communicated upwards to central management."

~ Director

Mid-Size U.S. Retailer

Figure 2: Top Pressures Driving Operational Intelligence

Percentage of Respondents, n = 235

Source: Aberdeen Group, July 2010

Another key pressure revolves around lack of efficiency when it comes to existing operations. Regardless of the function - manufacturing, sales process, finance, etc. - companies are noticeably dissatisfied with their ability

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to create better operating processes and improve business performance. BI tools and strategies can alleviate these challenges by providing daily or even real-time visibility into operating information, allowing for faster identification of bottlenecks and inefficiencies. BI is also an effective enabler in the process of identifying new business drivers that weren't readily available before.

Additional business pressures relate to the need for better customer service as well as more efficient data utilization. The increasing speed of business is prevalent not just on the supply chain side of an organization, but on the demand side as well. Maintaining quality customer service is highly dependent upon fast and efficient response to customer demands. Also, as more data becomes available - both structured and unstructured content - regarding customer sentiment, competitive information, and other previously unused data, companies are no longer willing to stand idly by and let potentially game changing information slip through their fingertips. A sound operational BI strategy will enable companies to capture this data, convert it into better insight, and deliver it to operational decision makers in a timely way.

The Maturity Class Framework

Aberdeen used the following four key performance criteria to distinguish the Best-in-Class from Industry Average and Laggard organizations:

- **"Right time" information access.** Measured as an average percentage of information delivered within the required operational time-frame (real time, near-real time, hourly, daily, weekly, etc.)

- **Financial performance.** Composite performance metric taking the average year over year change in two key operating line items:
    o Operating profit / earnings before Interest and Taxes (EBIT)
    o Cash generated from operations / operating cash flow

- **Sales pipeline management.** Composite performance metric taking the average year over year change in three areas of sales pipeline management:
    o New pipeline accounts identified
    o Conversion of inquiries to leads
    o New accounts sold

- **Customer service score.** Composite performance metric taking the average current performance in three key areas of customer management:
    o Customer retention
    o Customer satisfaction rate
    o On-time customer response rate

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

Definition of Maturity Class	Mean Class Performance
Best-in-Class: Top 20% of aggregate performance scorers	▪ **93%** of information is delivered in "right-time" ▪ **17%** Y/Y increase in financial operating performance ▪ **29%** Y/Y improvement in sales pipeline performance ▪ **94%** current customer service score
Industry Average: Middle 50% of aggregate performance scorers	▪ **72%** of information is delivered in "right-time" ▪ **7%** Y/Y increase in financial operating performance ▪ **12%** Y/Y improvement in sales pipeline performance ▪ **88%** current customer service score
Laggard: Bottom 30% of aggregate performance scorers	▪ **32%** of information is delivered in "right-time" ▪ **1%** Y/Y *decrease* in financial operating performance ▪ **2%** Y/Y improvement in sales pipeline performance ▪ **74%** current customer service score

Source: Aberdeen Group, July 2010

The Best-in-Class PACE Model

The ability for a company to achieve the performance described in Table 1 is predicated on a variety of factors related to the overall maturity of the organization. Best-in-Class organizations share a long list of common characteristics that underlie their success with BI delivery and the implementation or adoption of these characteristics is key to helping companies improve their overall performance. Therefore, successfully reducing IT involvement in the BI strategy and arming more Line-of-Business (LoB) managers with analytical capability requires a combination of strategic actions, organizational capabilities, and enabling technologies that are summarized in Table 2.

> "Management has recently decided to centralize the management of operational data within an analytical function in order to derive more information from the data."
>
> ~ VP Finance
>
> U.S. Auto Component Manufacturer

Table 2: The Best-in-Class PACE Framework

Pressures	Actions	Capabilities	Enablers
▪ Too many operational decisions are based on inaccurate / incomplete data	▪ Align operational Key Performance Indicators (KPIs) with line-of-business goals ▪ Connect operational decision makers with operational data	▪ Process for operational performance review, evaluation and alignment ▪ Single individual or team responsible for collecting & managing operational data ▪ Open exchange of operational data across business functions ▪ Operational performance is tracked and measured against corporate goals	▪ Operational BI (real or near real-time reporting) platform ▪ Traditional BI (historical reporting) platform ▪ Operational / transactional data warehouse ▪ Operational dashboards ▪ Data integration tools ▪ Operational forecasting tools ▪ Business Activity Monitoring (BAM) technology

Source: Aberdeen Group, July 2010

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Best-in-Class Strategies

In order to address the business pressures listed in Figure 2, organizations are taking two main actions at a strategic level. First, when it comes to managing line-level operations, each department will typically have specific goals to which they are beholden. Sales directors might have revenue and bookings targets while a manufacturing leader might work towards zero defect processes, etc. Regardless of the role or LoB, Best-in-Class companies are creating KPIs that align to their functional targets in order to better position themselves to achieve against those goals (Figure 3).

Figure 3: Best-in-Class Strategies for Operational Intelligence

Percentage of Respondents, n = 235
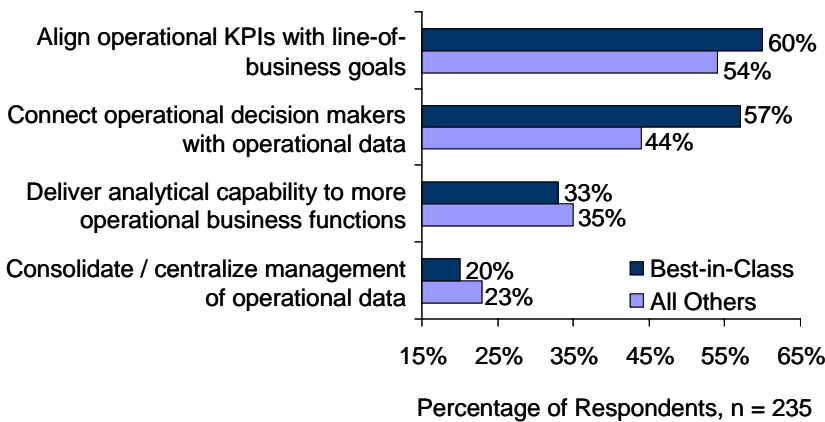
Source: Aberdeen Group, July 2010

Almost an identical strategic priority for Best-in-Class companies involves connecting operation decision makers with the data they need to manage their day-to-day businesses. One of the most frequently reported challenges when it comes to data management revolves around complexity and disparity of data sources. Companies are struggling to manage an ever expanding variety of sources that feed their key information systems. When it comes to BI, data might reside in an operational data warehouse, it might be pulled from an ERP or CRM system, it might come from a spreadsheet residing on someone's laptop, or a variety of other places. A key strategic priority for Best-in-Class companies is to take stock of what data is needed, understand where that data resides, and make efforts to deliver that information (in raw form at the very least) to the operational decision makers that need it. In addition to delivering them the data they need, Best-in-Class companies are also looking for way to arm more of those decision makers with analytical capability to support faster and cleaner business insight. Finally, as a strategic priority, the top performers taking action to consolidate and centralize the management of operational data. This strategy helps alleviate some of the disparity inherent in most data infrastructures, and allows for easier extraction and insight generation from that data.
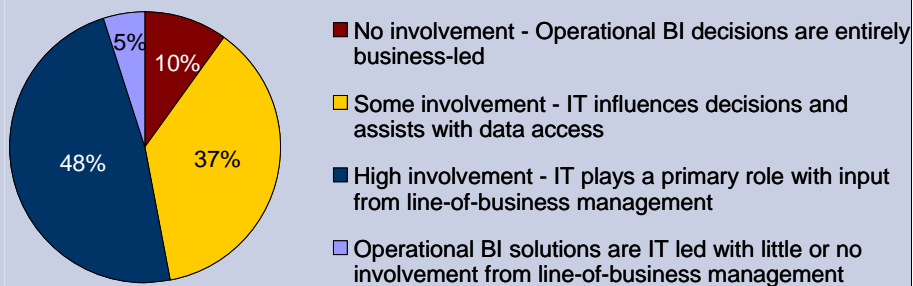
Aberdeen Insights — Strategy

Aberdeen Insights — Strategy

Perhaps the biggest cliché in the world of IT management is the notion of "aligning IT and business." This somewhat nebulous concept advocates the need to have the technical leaders and business decision makers working towards common strategic goals in order to promote greater long term business health and sustainability. One problem with this concept is that it typically assumes that IT is too technically oriented to care about or respect the financial implications of their actions, while also assuming that the business users are too technically impotent to understand how the IT infrastructure supports their every day working life. The reality is that top performing organizations are more likely to create not just a one-time goal alignment, but a continuous and iterative two-way collaboration between IT and business that helps foster more efficient use of IT resources and enhanced business performance.

Aberdeen's research shows that this concept applies just as cohesively to the world of operational intelligence. Some companies rely more heavily on IT when it comes to deploying BI and some are more likely to drive BI initiatives from the business side, but in either case there is a marked need for collaboration between the two sides (Figure 4).

Figure 4: The Role of IT in Operational BI Decisions

- 10% ■ No involvement - Operational BI decisions are entirely business-led
- 37% ■ Some involvement - IT influences decisions and assists with data access
- 48% ■ High involvement - IT plays a primary role with input from line-of-business management
- 5% □ Operational BI solutions are IT led with little or no involvement from line-of-business management

Source: Aberdeen Group, July 2010

In just about every case there are far too many technical considerations (speed of access, data complexity, user scalability, data integration) for the solution to reside entirely on the business side of the house. At the same time, the business requirements and performance metrics are far too specific in each case to allow for full IT ownership of a BI project. "Business without IT" or "IT without business" are two completely unthinkable concepts in the world today. The two functions are inextricably linked, and the companies that recognize the need for a constantly evolving collaboration between the two are better positioned for long term efficiency and business sustainability.

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

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Chapter Two:
Benchmarking Requirements for Success

The selection of a BI solution and its integration with key business systems plays a crucial role in the ability to turn these strategies into profit. The following case study illustrates how one company was able to leverage near real-time transactional information to reduce IT resource costs and deliver better decision support information to its operational managers.

Case Study — A Leader in Entertainment & Media

This large U.S.-based entertainment & media company operates a variety of retail locations, hotels, and restaurants across the country. This network of consumer-facing locations necessitates tight management and control of thousands of point-of-sale (POS) terminals and tablets in use by the various employees across the organization.

While the IT department tasked with managing these systems has been amply staffed and well suited to support such a large network of terminals, the process for identifying and solving technology issues was too slow and reactionary. "We started with a standard incident reporting process with a four hour hardware repair SLA. Typically we didn't know if anything was wrong with a system until someone went through the process of reporting an incident, costing time and resources. We needed to become more proactive with monitoring the health of our POS systems", reports a key analyst in the IT department. The organization decided to create a special task force to implement an operational dashboard for monitoring and managing their network of several thousand in-store POS systems. After considering a variety of development options, they settled upon a BI vendor to help provide them with their dashboard visualization and analytical capabilities.

The dashboard solution put into place drove immediate tangible business impact to two key operating functions within the organization. First, from an IT perspective, the group was able to better anticipate technical issues with the systems, reduce the IT resources required for fixing problems, and increase the turnaround time for system repair. Second, the operational managers tasked with overseeing each retail location were able to monitor transaction volumes in near real-time, allowing them to optimize their in-store resource utilization by repurposing people and technology to address high volume departments. This "right-time" visibility into POS health and transactional information has saved significant cost, time, and resources for the organization.

Fast Facts

Best-in-Class companies achieved:

√ **22%** year over year increase in operating cash flow

Compared with

√ **7%** increase for the Industry Average

√ **2%** *decrease* 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

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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
Process	Process for operational performance review / re-alignment		
	74%	56%	30%
	Formal operational KPI methodology in place (e.g. balanced scorecards, six sigma, etc.)		
	55%	43%	13%
Organization	Single individual or team responsible for collecting and managing operational data		
	62%	46%	26%
	Executive-level champion for BI projects		
	58%	46%	27%
Knowledge	Open exchange of operational data across business functions		
	55%	40%	28%
	Formal programs to coach / train / develop analytical talent in-house		
	42%	18%	5%
Performance	Operational performance is tracked against corp. goals		
	86%	62%	45%
	Real or near real-time measurement of operational business metrics		
	64%	45%	25%
Technology	Operational BI (real or near real-time reporting) platform		
	62%	42%	18%
	Operational / transactional data warehouse		
	58%	47%	29%
	Operational dashboards		
	56%	46%	25%
	Business Activity Monitoring (BAM) technology		
	31%	16%	3%

Source: Aberdeen Group, July 2010

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 an operational BI 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 operational performance.

Process

Companies thrive when the KPIs that drive the business are measured against the activities of its employees and improved as needed. Most companies recognize and appreciate this concept, but all too often the process of KPI creation and alignment is treated as a stagnant process when in fact these metrics need to be living, breathing, and constantly evolving entities. Best-in-Class companies are 2.5-times more likely to have a process in place to periodically evaluate operational performance and the associated performance metrics, such that resources can be re-aligned and the business can continue to adapt to changing market conditions. Additionally, when it comes to KPIs the Best-in-Class are more than four-times more likely than Laggards to have adopted a formally accepted KPI methodology such as balanced scorecards, five nines reliability, and six sigma (Figure 5).

"In our business, we have several platforms that are loosely integrated making extraction of operational information cumbersome. Much of what we do remains spreadsheet based. The economy has hurt our customers who are looking to leverage existing systems, as are we. "

~ CEO

Mid-Size U.S. Retailer

Figure 5: Process and Organizational Capabilities
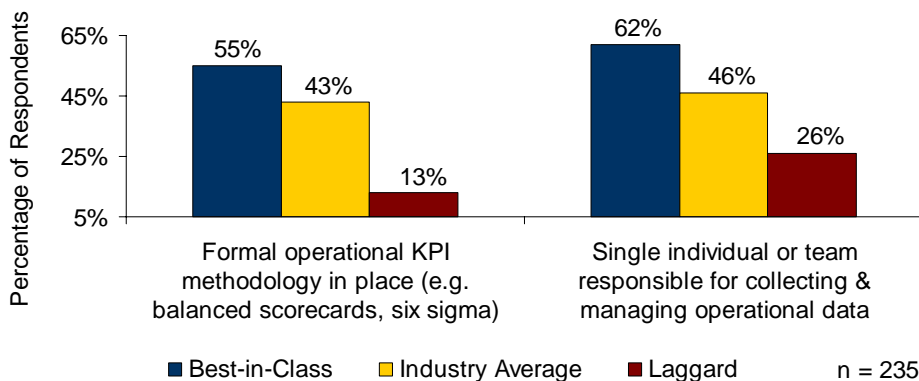
Source: Aberdeen Group, July 2010

Organization

Touching again on the concept of IT-business collaboration, the ability to create an environment to support operational insight is often tied to the ability to sell the concept and the benefits to the decision makers on both sides of the executive table. Executive sponsorship for implementations like operational BI is often crucial in facilitated adequate funding and human resource allocation. The research shows that Best-in-Class companies are 57% more likely than all other companies to have an executive level sponsor or champion for their operational BI projects. Often hand-in-hand with

executive sponsorship is the need for single ownership of the operational data environment. If an executive gives the green light on a BI initiative, typically he or she will require that a single individual or small group take ownership of the project in order to ensure that the right amount of resources are being applied to promote success. Best-in-Class companies are more than twice as likely as Laggards to have a single individual or group responsible for collecting and managing operational information (Figure 5).

Case Study — NCC Media

Headquartered in New York City, NCC Media is an advertising sales, marketing, and technology company that harnesses the enormous reach and consumer power of cable television programming, new interactive technologies, and online products in every US market. Working on behalf of America's leading regional and national advertisers, NCC has a workforce of over 450 employees across 17 offices nationwide.

Part of NCC Media's unique value proposition is their ability to deliver a highly specific and targeted audience for their clients to address, based on leveraging 3rd party product and demographic data. "The initial process of slicing and dicing our data to discover the best messaging opportunities for the client was extremely slow and manual", recalls Nicole Gleason, Director of Analytical Services at NCC Media. "Exclusively using spreadsheets, we were largely tied to one dimension of data at a time, and our ability drill down into multiple dimensions was severely hampered by an endless circle of sorting columns, summarizing the data, then re-sorting and summarizing again." Lacking the ability to summarize multiple dimensions into one aggregated view, NCC Media has had trouble developing quick and targeted analyses to meet their clients' needs, and the decision to move toward a more formal analytical strategy was an easy one.

Based on prior experience with the technology, NCC Media selected a BI solution that could meet their needs for fast, efficient, and intuitive analytical capability while delivering an interactive aggregated view of their data with drill down capability. "While we are relatively early on in our BI strategy, our pace of insight discovery has quickened significantly since deploying a dedicated analytical tool", reports Gleason. "For instance, when prepping for a sales call, instead of overusing a single case study that's generic, we can very quickly generate custom relevant information to create a story that will really make sense to the client. We would not have had that opportunity before just using spreadsheets." From a more macro perspective, NCC Media now has the ability to address new markets and industries where they previously had very little traction. The fast, intuitive, and targeted analytical capability brought on by a sound BI strategy has enabled them to discover new insights and new markets previously unaddressed and has opened up the opportunity to partner with other agencies lacking their analytical capability, all leading to significant revenue growth opportunities for NCC Media.
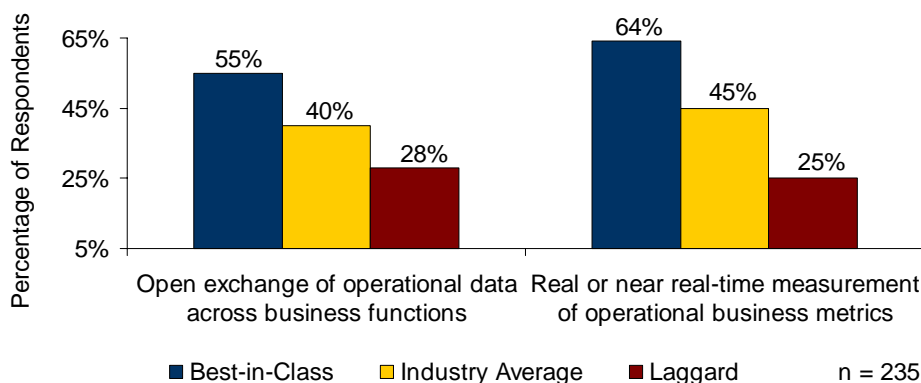
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Knowledge Management

When it comes to developing and managing BI talent and knowledge, one of the key themes to come out of this research is the concept of developing versus hiring analytical talent. As much BI and analytical domain expertise as there is floating around in the market, companies these days are more likely to look for ways to develop talent and analytical prowess in-house, as opposed to hiring those skill sets. The research shows that the Best-in-Class are four-times more likely than all other companies to develop, coach, or train analytical talent in-house. Part of the reason the top performers are able to build these skills within their own walls is the environment of collaboration that they have created within their own culture. In order to generate an atmosphere that values timely insight and "right-time" decision support, employees need free flowing information across functional silos so that they can understand the organizational impact of their decisions. Best-in-Class organizations are twice as likely as Laggards to report having an open exchange of operational data across business functions (Figure 6).

Fast Facts

Best-in-Class companies are: **2.3-times more likely** than all other companies to have a *BI center of excellence (COE)* or competency center (BICC) in place

Figure 6: Knowledge and Performance Management Capabilities

Source: Aberdeen Group, July 2010

Performance Management

Every company large and small works toward a set of long-term business goals. Double-digit revenue growth, positive cash flow, and customer growth are common for smaller start-ups, while publicly traded companies are beholden to wall street requirements like earnings-per-share and price-earnings ratio. At any level, the top performing companies have a deep and intimate understanding as to the operational drivers that lead to performance in those long-term metrics. What does our weekly close ratio need to be in order to double our customer base? What does our inventory turnover need to be in order to boost cash flow by 20%? What manufacturing capacity is required to hit our revenue targets? Best-in-Class companies know the answers to these questions and are able conceptualize the link between day-to-day operational performance and long term strategic goals. The research validates this claim in showing that 86% of top performers report tracking operational performance and validating it against

strategic corporate goals. Additionally, when it comes to operational decision making, instantaneous information is not always necessary, but companies with faster information at their fingertips are certainly at an advantage. Research shows that Best-in-Class companies are more than twice as likely as all others to have real-time or near-real time access to operational information (Figure 6).

Technology

The technology stack of BI - including data collection, information assembly, and insight delivery - is very much applicable when it comes to creating and disseminating operational intelligence as well. On the back-end portion of the information value chain, so to speak, companies are seeing value in having a dedicated data warehouse or data mart specific to operational or transactional information. Additional activity within the collection and assembly buckets includes integration of various sources of operational data. Given the disparity in most information environments these days, Best-in-Class companies are 77% more likely than others to leverage data integration tools (Figure 7).

Figure 7: Best-in-Class Operational Technologies in Use
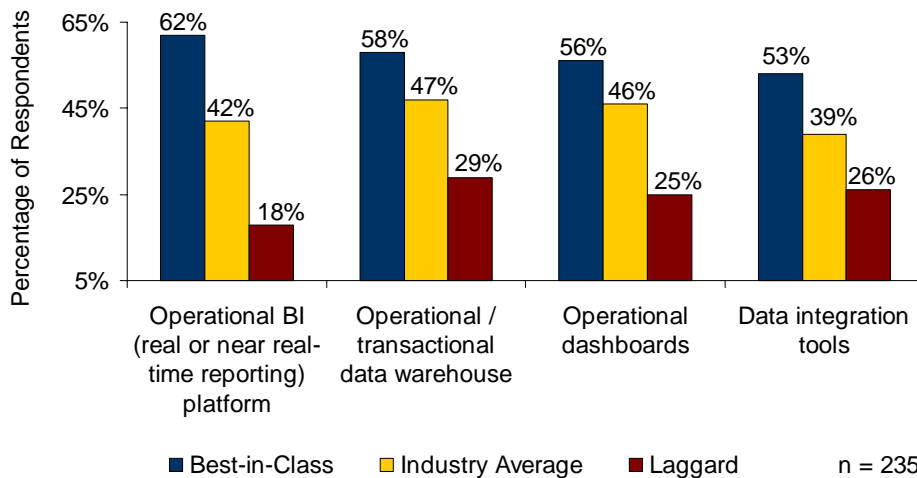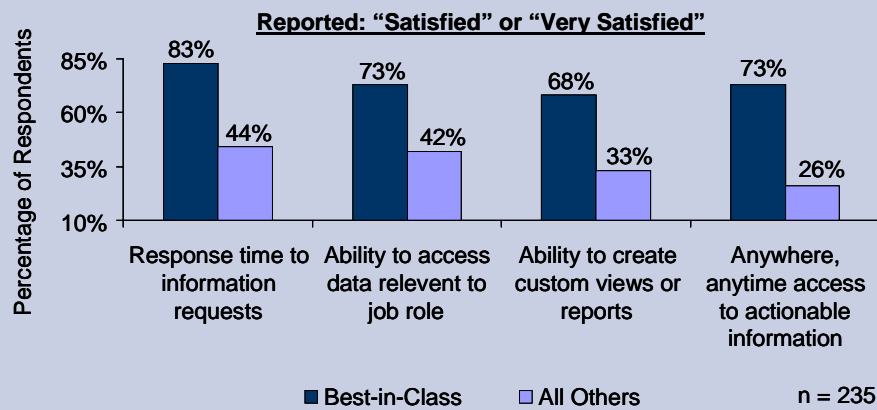

Source: Aberdeen Group, July 2010

Additionally on the technology front, Best-in-Class companies are more likely to use a full operational BI platform that enables real or near real-time insight identification. As a piece of this functionality, the top performers are using dashboards and other visualization tools to help distribute operational insight to the workforce more efficiently. The research shows that Best-in-Class companies are more than twice as likely as Laggards to use operational dashboards (Figure 7).

Aberdeen Insights — Technology

Part of the value of operational intelligence is the ability to share insight across silos, involve more people in the decision making process, and come to a quicker resolution when a decision is on the table. Fast and clean information is a large piece of that puzzle, but several other factors contribute to an employee's ability to make better operational decisions. The research shows that Best-in-Class companies are far more satisfied with their operational solutions across a variety of metrics (Figure 8).

Figure 8: Happier Users, Higher Performance

Source: Aberdeen Group, July 2010

The first two columns represent employee satisfaction with information timeliness and relevance, two major themes of this research. However, operational decision makers also need the ability to tailor the solution or a particular dashboard view to their specific role and needs. Additionally, given the degree of global dispersion at many companies today, employees need the ability to access insight from a variety of different devices, in a variety of locations. The research shows that Best-in-Class companies are also far more satisfied when it comes to customization and ease of access as well.

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Chapter Three:
Required Actions

Whether a company is trying to move its performance in operational intelligence 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

- **Adopt a continuous process to identify operational KPIs**. As discussed above, as companies adapt and adjust to changing conditions in the marketplace, the performance metrics that determine success in the new landscape are continuously evolving as well. In order to help facilitate long-term sustainability, companies need to continuously update the metrics that they hold their employees to. Only 13% of Laggards report having a formalized KPI creation and adoption process, less than one-quarter the percentage of Best-in-Class companies that have adopted such a process. By legitimizing the KPI process and applying them to the changing business paradigm, Laggard organizations will be more nimble and ensure they are consistently measuring and managing to the right business metrics.

- **Collect and incorporate end-user needs for operational BI**. All too often BI projects either fall flat or fail to reach significant adoption because of a lack of collaboration between the users of the tool and the implementers of the tool. When the business users are told what they need rather than asked what they need, BI deployments become problematic and sometimes languish in under-utilization. Best-in-Class companies are 3.1-times more likely than Laggards to have a process in place to gather and incorporate end-user needs for BI. By listening to what the users need, Laggards will be able to tailor a more usable and appropriate operational BI solution, positioning them to make better day-to-day decisions across the organization.

- **Consider implementing a dedicated operational BI platform.** When real-time, hourly, or daily decisions really drive the business, as is the case in some industries and functions, a dedicated platform for operational BI has shown to be quite valuable. Best-in-Class companies are 3.4-times more likely than Laggards to have a platform in place for operational BI. When appropriate, such a deployment will enable better information management from the back-end data source to the operational dashboard, will enable better creation of decision supporting business insight, and will enable for speedier dissemination of that information to the operational decision makers in the organization.

Fast Facts
Best-in-Class companies achieved:

√ **40%** year over year increase in new pipeline accounts identified

Compared with

√ **14%** increase for the Industry Average

√ **8%** increase for Laggards

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Industry Average Steps to Success

- **Improve ability to share and exchange data across operational silos.** It is rare that an important decision made in one functional department will only affect that department. Operational decisions typically touch a number of different groups within the organization, and the ability to share information across these silos is crucial for understanding the impact of decisions and leveraging more complete information. Best-in-Class companies are 38% more likely than Industry Average companies to have this type of cross-functional information exchange. By improving this ability, Industry Average companies will generate better information to support their decisions, and will do so with a higher degree of confidence that the decision they make is in the best interest of the company as a whole and not just their specific department.

- **Develop programs to coach/train/develop analytical talent in-house.** There are of course a number of different approaches to take when building up analytical expertise within the organization. Hiring skill sets will always be an important way to achieve higher organizational intelligence, but Best-in-Class companies are augmenting those efforts by nurturing analytical talent within their own walls. According to the research, only 18% of Industry Average companies are taking steps to coach, train, or develop this talent in-house, a deficiency that is likely holding back their BI culture and not allowing for their most curious and analytically inclined employees to shine through. By developing programs to develop these skills in-house, Industry Average companies will be able to awaken the operational intelligence currently lying dormant in a number of employees, allowing for better and faster operational insight to pervade the organization.

- **Implement automated alert reporting capabilities**. An important technology feature of an operational BI platform or other tactical decision support system is the ability to automatically alert decision makers when a key state change occurs (i.e. a sudden drop in manufacturing output, a change in supplier lead time, or a marked change in measurable customer sentiment). The research shows that only 21% of Industry Average companies have this capability. Leveraging automated alert technology will reduce risk for Industry Average companies, enable better anticipation of major market shifts, and allow for faster reaction to unanticipated changes.

Best-in-Class Steps to Success

- **Improve the ability to measure ROI from BI deployments.** As efficiently as Best-in-Class companies are at generating and delivering insight, and as well as they have performed from a financial perspective, it is surprising to see that only a third of them have the ability to measure their return on BI investment. Adoption rate, IT resource utilization, FTE usage, and a variety of other

> "With dynamic business environments and demanding customer needs, it is necessary to ensure that frontline people have all help to win those marginal orders or gain that marginal value for optimal business performance."
>
> ~ Operations Manager
>
> Large Asian Industrial Manufacturer

metrics all play into the tangible ROI that can come from an efficient BI deployment. By creating a logical way of measuring ROI and applying it to their BI deployments, the Best-in-Class will not only be able to achieve top notch business performance, but will also ensure efficient utilization of their time, money, and human capital when it comes to creating operational insight.

- **Seek ways to automate data integration and cleansing.** Feedback from the end-user community consistently validates the assertion that back-end data management comprises the bulk of time and money spent on BI and analytical activity. If the goal is to deliver faster and cleaner information to support operational decisions, then companies need to find ways to automate some of their back-end data integration and cleansing activities. However, less than one-third of Best-in-Class companies currently report automating data integration and cleansing. Applying processes along with the appropriate technologies to the operational data infrastructure will promote faster homogenization of data and allow for more relevant insight to be delivered to key decision makers in a timely way.

- **Investigate Business Activity Monitoring (BAM) technology.** Given the fact that more Best-in-Class companies report having real-time or near-real time access to their critical data, they are in a position to generate an even more sophisticated operational decision environment. BAM technology is a type of decision support software specifically designed for real-time analysis and visualization of mission-critical data. For the most time-sensitive applications requiring a high degree of trust in the insight displayed, Best-in-Class companies can turn to BAM technologies and gain the real-time insight they need to bring their organizations to a higher level of performance.

Aberdeen Insights — Summary

This report makes a concerted effort to divorce the concepts of operational intelligence and real-time intelligence. The research does show that Best-in-Class companies are more likely to have real-time or near-real time access to their operational data, but this speed of delivery does not equate to higher performance. The data in Table 1 shows that what matters is not the speed of access to data, but the ability to access data within the required time-frame, whatever that requirement is. The real value of operational intelligence is the ability to apply BI and analytical techniques to every day decisions and create insight that is based on fact, rather than gut-feel. This concept can be applied to customer service operations just as easily as it can be applied to sales pipeline management or marketing promotional tracking.

continued

Aberdeen Insights — Summary

The crux of a Best-in-Class strategy lies in their ability to deliver analytical insight to more areas of the business and share information collaboratively across those silos. The research shows that top performers are distributing this insight to more areas of company operations (Figure 9).

Figure 9: Spreading BI to More Operational Functions
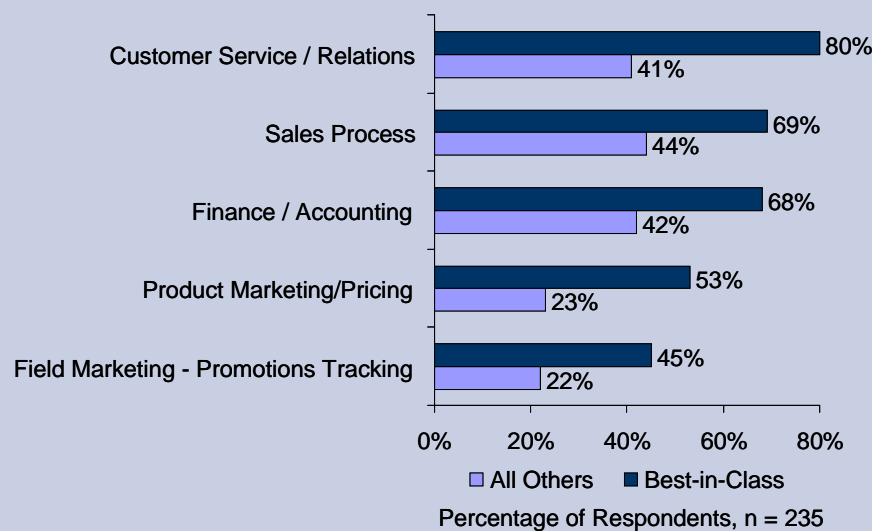
Source: Aberdeen Group, July 2010

Responding to a lack of complete information in their daily decisions, Best-in-Class companies have created an efficient environment for operational intelligence that crosses multiple functions and allows for the creation of faster and more relevant business insight. Leveraging the right operational processes and internal capabilities, and utilizing an efficient technology portfolio, Best-in-Class companies are able to generate operational insight that leads to superior financial, sales, and customer service performance.

Appendix A:
Research Methodology

Between June and July 2010, Aberdeen examined the use, the experiences, and the intentions of 260 enterprises using BI in a diverse set of operational activities.

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: CEO / President (21%); EVP / SVP / VP (20%); Director (16%); Manager (19%); Consultant (7%); Staff (13%); and other (4%).

- *Department / function:* The research sample included respondents from the following departments or functions: procurement, supply chain, or logistics manager (12%); operations manager (13%); IT manager or staff (23%); sales and marketing staff (19%); senior management (18%); and other (15%).

- *Industry:* The research sample included respondents from a variety of industries. The largest segments represented were: manufacturing (17%); high tech/software (14%); financial services (10%); and public sector (8%).

- *Geography:* The majority of respondents (65%) were from North America. Remaining respondents were from the Asia-Pacific region (12%) and EMEA (23%).

- *Company size:* Nineteen percent (19%) of respondents were from large enterprises (annual revenues above US $1 billion); 32% were from midsize enterprises (annual revenues between $50 million and $1 billion); and 49% of respondents were from small businesses (annual revenues of $50 million or less).

- *Headcount:* Thirty-five percent (35%) of respondents were from large enterprises (headcount greater than 1,000 employees); 29% were from midsize enterprises (headcount between 100 and 999 employees); and 36% of respondents were from small businesses (headcount between 1 and 99 employees).

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Table 4: The PACE Framework Key

Overview
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: **Pressures —** external forces that impact an organization's market position, competitiveness, or business operations (e.g., economic, political and regulatory, technology, changing customer preferences, competitive)   **Actions —** 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)   **Capabilities —** the business process competencies required to execute corporate strategy (e.g., skilled people, brand, market positioning, viable products / services, ecosystem partners, financing)   **Enablers —** 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)

Source: Aberdeen Group, July 2010

Table 5: The Competitive Framework Key

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

Source: Aberdeen Group, July 2010

Table 6: Relationship Between PACE and the Competitive Framework

PACE and the Competitive Framework – How They Interact
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.

Source: Aberdeen Group, July 2010

Appendix B:
Related Aberdeen Research

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

- *Self-Service BI: Empowering the Line-of-Business Manager*; May 2010

- *The TCO View of Business Intelligence*; April 2010

- *Business Intelligence in Banking: Analytical Customer Focus Drives Performance;* April 2010

- *Data Management for BI: Strategies for Leveraging the Complexity and Growth of Business Data*; December 2009

- *Top Floor to Shop Floor: Business Insight for the Discrete Manufacturing Industry*; November 2009

- *Performance Management in the Midmarket*; November 2009

- *BI for the C-Suite: Top Level Visibility Drives Top Notch Cash Flow*; October 2009

- *BPM Accelerated: Slashing Cost and Time with Agile Business Processes*; October 2009

- *Intelligent Human Capital Management: Workforce Analytics Drive Profit and Performance*; September 2009

- *BI for the SMB 2009: How to Slash Cost and Empower the Business User*; July 2009

Information on these and any other Aberdeen publications can be found at www.aberdeen.com.

Author: Michael Lock, Senior Research Analyst, Business Intelligence, michael.lock@aberdeen.com