

# **Predictive Analytics – Driving Sales with Customer Insights**

David White



## Executive Summary

With the rise of social media, enterprises potentially have access to more data about their customers than ever before. But, more data doesn't necessarily mean better predictive insights. Prior Aberdeen research found that many organizations were unable to refresh predictive models at the rate needed by the business. While 27% of business users needed to refresh their predictive models in close to real-time, only 60% of those users were able to do so.

This benchmark report is based on data collected from 121 organizations using predictive analytics and data mining technology for sales and marketing applications during January and February 2010.

### Best-in-Class Performance

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

- Average response rate of 9% for a marketing campaign
- Current average incremental sales rate of 10%
- A 3% year-to-year reduction in marketing costs
- An 8% year-to-year reduction in customer churn

### Competitive Maturity Assessment

Survey results show that the firms enjoying Best-in-Class performance shared several common characteristics, including:

- A customer retention rate of 88%, compared to an 84% customer retention rate for Industry Average companies and a 79% rate for Laggards
- An operating profit margin more than twice that of Laggard organizations: 23% for Best-in-Class, 17% for Industry Average and 11% for Laggards
- Year over year growth of 9% and 15% in operating profits and customer retention rate respectively

### Required Actions

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

- Gain timely access to a rich variety of customer related data
- Develop the ability for business users to be able to use predictive analytics tools without the assistance of a statistical expert
- Work on integrating predictive capabilities into the organizations overall forecasting process

### 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

The range and volume of data that can feed data mining and predictive analytics models increases un-abated. Companies are increasing their ability to tap into data about their customers and markets to improve their sales and marketing effectiveness. For example, an Aberdeen benchmark report published in February 2009 ([Predictive Analytics: The Right Tool for Tough Times](#)) found that Best-in-Class companies were able to grow incremental sales by 24%, since adopting predictive analytics.

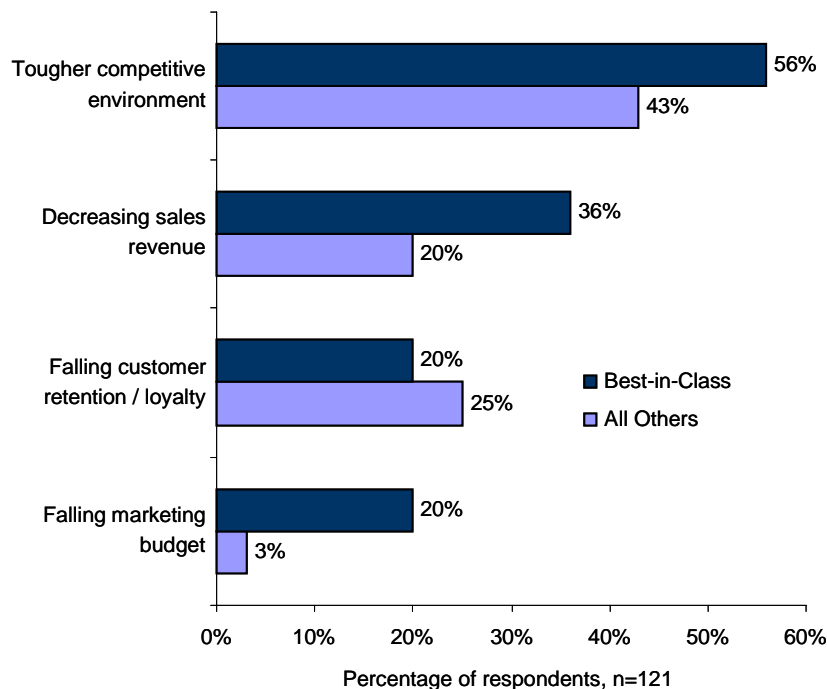
This benchmark report is based on data collected from 121 organizations using predictive analytics and data mining technologies for sales and marketing applications during January and February 2010.

Aberdeen found that organizations were experiencing a number of pressures driving the adoption of predictive technologies. Figure 1 shows the top four pressures being experienced by Best-in-Class organizations (Industry Average and Laggards organizations are shown together as all others).

### Fast Facts

- ✓ Experience is not a big indicator of success
- ✓ 47% of Laggard organizations have five or more years of experience with predictive analytics, compared to just 32% of the Best-in-Class

**Figure 1: Tougher Competitive Environment Drives Adoption**



\* Survey respondents were asked to choose two top pressures  
Source: Aberdeen Group, September 2010

The tougher competitive environment is the top pressure across the board, whether the organization is performing at Best-in-Class, Industry Average, or Laggard levels (see Table I for a full definition of each maturity class). There are variations, however, in some of the secondary pressures. For example, Best-in-Class enterprises are much more driven by falling sales revenue than other organizations. And, while falling marketing budgets is also a relatively acute pressure for these top performing companies, it's barely a concern at all for Industry Average and Laggards. Only 3% of Industry Average and Laggard respondents acknowledge falling marketing budgets as a pressure. However, among the top pressures for these companies are responding to pressures from the increasing cost of customer acquisition (23%) and also problems in forecasting demand (21%).

## **The Maturity Class Framework**

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Aberdeen used four key performance criteria to distinguish the Best-in-Class from Industry Average and Laggard organizations in the use of predictive analytics for sales and marketing.

The first two criteria were concerned with marketing performance and efficiency. The first criterion was the current average response rate to a marketing campaign measured as a percentage. Secondly, Aberdeen measured the year-over-year reduction in marketing costs that the organization had achieved, also expressed as a percentage. Taken together, these two measurements provide an indication of how successful a firm has been at understanding target markets and making the right offers to those markets. For example, suppose a mobile phone provider has a mailing list of 1 million potential buyers for its products and services. It could, simplistically send direct mail to all 1 million contacts promoting the same product to everyone for the same price. Alternatively, by appropriate segmentation, the company can simultaneously improve the marketing response rate and lower marketing costs. This approach is discussed in more detail in Chapter Two of this report.

The current incremental sales rate, expressed as a percentage, was the third criteria used. This measure also ties into marketing effectiveness – how much does a marketing campaign increase sales by, over and above the sales level, if no marketing activity is undertaken. Finally, the fourth criteria examined the year-to-year change in customer churn. Churn is used as a broad measure for how well the sales and marketing organization is able to understand and engage with diverse customer segments. The values of these key performance indicators for the three maturity classes - Best-in-Class, Industry Average, and Laggards - are shown in Table I.

**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>• Marketing response rate of 9%</li> <li>• 3% reduction, year-over-year, in marketing costs</li> <li>• Current incremental sales rate of 10%</li> <li>▪ 8% reduction, year-over-year, in customer churn</li> </ul>
<b>Industry Average: Middle 50%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>• Marketing response rate of 5%</li> <li>• 2% increase, year-over-year, in marketing costs</li> <li>• Current incremental sales rate of 4%</li> <li>▪ 1% increase, year-over-year, in customer churn</li> </ul>
<b>Laggard: Bottom 30%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>• Marketing response rate of 1%</li> <li>• 7% increase, year-over-year, in marketing costs</li> <li>• Current incremental sales rate of 1%</li> <li>▪ 6% increase, year-over-year, in customer</li> </ul>

Source: Aberdeen Group, September 2010

### The Best-in-Class PACE Model

Using predictive analytics or data mining to improve sales and marketing performance requires a combination of strategic actions, organizational capabilities, and enabling technologies that are summarized in Table 2.

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

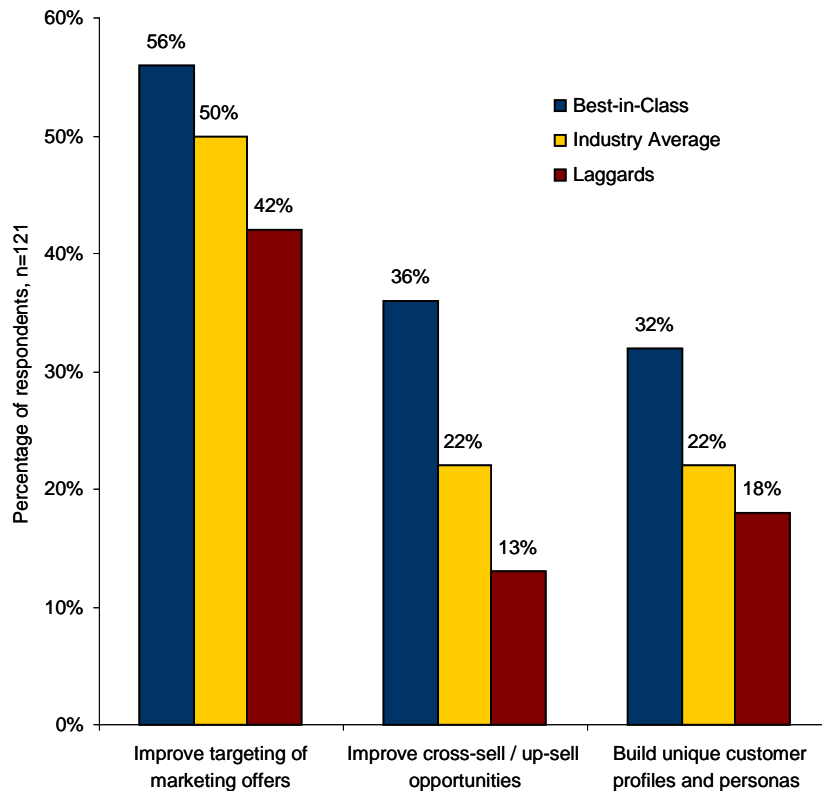
Pressure	Actions	Capabilities	Enablers
<ul style="list-style-type: none"> <li>▪ Tougher competitive environment</li> </ul>	<ul style="list-style-type: none"> <li>• Improve targeting of marketing offers</li> <li>• Improve cross-sell / up-sell opportunities</li> <li>▪ Build unique customer profiles and personas</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to align the right customer representative with the right client</li> <li>• Skills of customer facing staff understood</li> <li>• Business users able to use predictive tools without a dedicated statistician</li> <li>• Access to customer transactional data, customer behavioral data, internal unstructured data and external unstructured data</li> <li>• KPI's defined and monitored to measure customer performance</li> <li>▪ Ability to apply behavior scoring to customer data</li> <li>▪ Predictive analytics integrated into forecasting process</li> </ul>	<ul style="list-style-type: none"> <li>• Customer segmentation tool</li> <li>• Real-time collection method</li> <li>▪ Automated rules-based process engine</li> </ul>

Source: Aberdeen Group, September 2010

## Best-in-Class Strategies

Altogether, survey respondents were asked to choose from several possible strategies to manage the pressures they are currently facing. The top three strategic actions chosen by Best-in-Class companies are shown in Figure 2.

**Figure 2: Top Strategies vary by Maturity Class**



\* Survey respondents were asked to choose two top pressures  
Source: Aberdeen Group, September 2010

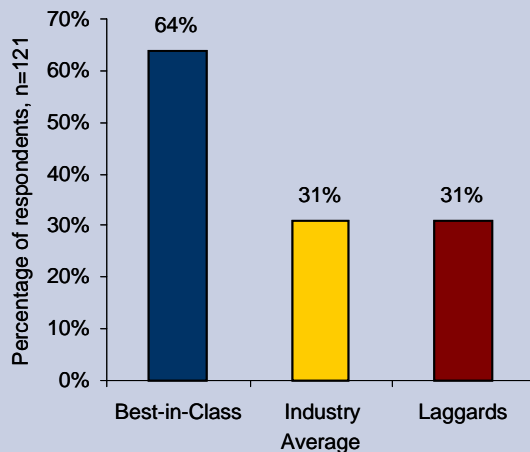
While improving the targeting of marketing offers is the top strategy for all types of organizations, the priorities given to other strategies starts to illustrate the different levels of marketing maturity. For example, twice as many Best-in-Class companies prioritize the building of detailed customer profiles than are striving to obtain a 360° view of their customers (not shown in Figure 2) – 32% vs. 16%. In comparison, these two strategies are equally prevalent among all other (those performing in the Industry Average and Laggard categories) survey respondents with 22% of survey respondents favoring each strategy. As we'll see later, Best-in-Class companies have better access to all types of customer data – including transactional and unstructured data. This has enabled the Best-in-Class to create a well-rounded, 360° view of their customers. Building on this firm foundation, the next stage is to create more detailed unique customer profiles that can support sales and marketing efforts more closely. Industry Average

organizations, and to a greater extent, Laggards have yet to construct the 360° customer view before they can build detailed customer profiles.

### Aberdeen Insights — Strategy

Organizations of all maturity classes – Best-in-Class, Industry Average and Laggards – are keenly focused on a strategy to improve the targeting of their marketing. For all maturity classes it is the most prevalent strategic action by some margin. Some capabilities examined in this report, such as the ability to provide offers customized to specific market segments, are found almost equally in all maturity classes. Other capabilities however, are not (Figure 3).

**Figure 3: Dedicated Team to Discover New Insights**



Source: Aberdeen Group, September 2010

Compared to their peers, over twice as many Best-in-Class survey respondents report that they have a team dedicated to gaining a deeper understanding of their customers. Traditional approaches such as customer surveys or focus groups can be valuable, but many organizations now have access to an increasing wealth of digital data.

In addition to being more likely to have a team unearthing customer insights, Best-in-Class companies also have a greater wealth of data to plumb (see the Knowledge Management section in Chapter Two). Gems can be found in the transactional data that many organizations have been accumulating for years. Many B2B companies, for example, will have digital records of which customer bought which products and when. Often, a history of support calls and field service actions for each customer will have been recorded too.

*continued*

### Aberdeen Insights — Strategy

However, Best-in-Class firms are also forging ahead in the use of newer technologies, such as text mining and sentiment analysis to heighten their customer insights. Seventy-seven percent (77%) of the Best-in-Class plan to utilize text analysis within 12 months, with 35% also using sentiment analysis software in the same time period.

These emerging technologies can be used to extract insights from unstructured data, such as emails, transcripts of customer services calls, instant messaging, social media and other customer recommendation websites.

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 predictive analytics and data mining technologies and their integration with business processes plays a crucial role in the ability to turn these strategies into profit.

### Case Study — AccuQuote

AccuQuote, headquartered near Chicago Illinois, provides affordable term life insurance by combining online life insurance quotes with the personal service of an experienced life insurance professional. Since its inception in 1986, the company has helped over one million people find life insurance, obtaining over \$50bn in life insurance for its clients.

However, AccuQuote identified its lead management program as a target for improving business performance. “We knew that 20% of our leads were unlikely to move through to paid status,” says Sean Cheyney, vice president of marketing and business development, “The problem was that we didn’t know which leads were which.” From experience, AccuQuote knew that the faster an agent called a lead after it was generated, the more likely it was to convert to a sale. Consequently, incoming leads from web forms were ordered by time received and fed into an outbound dialer.

But, the company also recognized that a more sophisticated way to prioritize leads could lead to increased sales. To improve the sales conversion rate, AccuQuote adopted real-time lead scoring software. The lead-to-sales process now works like this:

- AccuQuote prospects are guided by targeted advertising to visit the company’s website and fill out forms to get further information about insurance options.
- Incoming leads are ranked on a scale of 1 to 10 by the lead scoring software, based on their propensity to purchase.
- The most likely-to-purchase prospects are then moved to the top of the queue for the outbound dialer.
- The best scoring leads are channeled to the best agents to handle over the phone. Leads that are judged to be less likely to convert are contacted through email or passed to trainees to work on the phone.

*continued*

### Fast Facts

- √ Only 12% of Best-in-Class survey respondents using predictive analytics for sales and marketing describe their organization as "risk averse"
- √ However, 44% of Best-in-Class survey respondents using predictive analytics for sales and marketing describe their organization as "risk taking"

**Case Study — AccuQuote**

Now, instead of calling every lead, sales representatives are spending time on the leads that are most likely to become customers — freeing up an extra hour a day per agent to spend on cross-sell and needs analysis. “The extra time for proactive selling has delivered historic gains to our profitability,” says Don Loonam, senior vice president of sales, marketing and fulfillment at AccuQuote. “We know that we have leads that inevitably drop out of the sales funnel. Lead scoring allows us to vet them out very quickly — before we invest too many resources.”

Along with predicting intent to purchase, AccuQuote executives were also looking to increase conversions by identifying which leads would be able to pass through the underwriting process. So far, AccuQuote has been able to increase sales conversions by 4% to 5% using lead scoring.

### 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 across the key metrics.

**Table 3: The Competitive Framework**

	Best-in-Class	Average	Laggards
<b>Process</b>	Ability to apply behavior scoring to customer data		
	43%	33%	31%
<b>Organization</b>	Predictive analytics integrated into forecasting process		
	43%	31%	24%
	Skills and talents of customer facing staff understood and documented		
	48%	35%	25%
	Ability to align the right customer representative with the right client		
	55%	34%	29%
	Business staff can use predictive models without dedicated statistics expert		

	Best-in-Class	Average	Laggards
<b>Organization (cont.)</b>	39%	34%	25%
	Team dedicated to discovering new customer insights		
	64%	31%	31%
<b>Knowledge</b>	Access to all customer transactional data		
	77%	61%	54%
	Access to customer behavior data		
	64%	56%	47%
	Access to internal unstructured data		
	55%	43%	33%
	Access to external unstructured data		
	41%	29%	22%
<b>Technology</b>	Customer segmentation tool		
	65%	62%	49%
	Real-time analytics collection method		
	67%	42%	38%
	Automated rules based process engine		
	45%	35%	32%
<b>Performance</b>	Key performance indicators for measurement of customer performance defined		
	67%	58%	47%
	Track and measure key performance indicators for customer performance		
	65%	51%	39%

Source: Aberdeen Group, September 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 reveals that there are a number of capabilities and competencies that help to deliver top level performance.

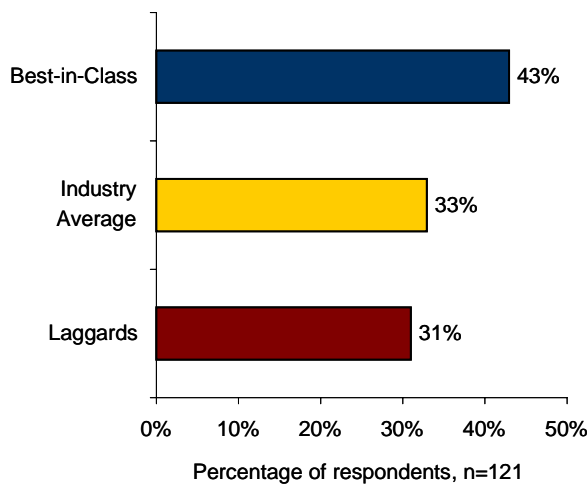
### Process Management

Best-in-Class companies are about 30% more likely than all other companies to apply predictive analytics to customer scoring applications (Figure 4). Scoring can be used to drive either outbound or inbound sales and marketing activities – or both. The use of scoring techniques is a powerful way that companies can improve the targeting of marketing offers.

Chapter One introduced a fictitious mobile phone operator and its mailing list of 1 million potential buyers for its products. By appropriate segmentation of that mailing list the firm can improve both marketing

response and reduce its marketing costs. One effective way to perform this segmentation is by building a predictive model using data on the customers and then performing analysis. For example, the company may be able to split the 1 million potential buyers into three lists. The first list might be strong candidates for product A, the second list strong candidates for product B, and the third list poor candidates for either product. By mailing appropriate offers to the first two lists and doing nothing with the third list the company should be able to simultaneously increase the marketing response rate and lower marketing costs by reducing the total number of mail pieces.

**Figure 4: Apply Behavioral Scoring to Customer Data**



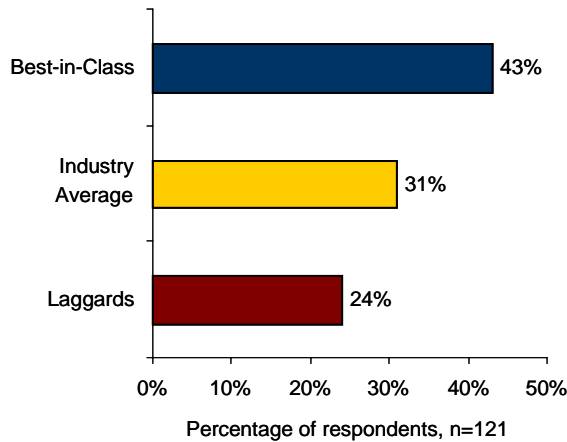
Source: Aberdeen Group, September 2010

Data fed into this predictive model could include basic demographics and any sales history with the company. In addition, behavioral data gathered from previous marketing activities – such as website navigation and click stream data – can be included. Building a rich model of predicted customer behavior in this way can increase sales and trim un-productive marketing expense.

Predictive analytics can also be used to direct in-bound sales prospects in addition to simply driving outbound marketing campaigns. For example, by analyzing how a person navigates an e-commerce website in comparison to other individuals that have passed that way before, appropriate products and services can be offered. Similar techniques can be used for in-bound traffic to call centers as described elsewhere in the case studies featured in this report.

Another notable capability is the integration of predictive analytics into the forecasting process. Best-in-Class performance is linked to the ability to integrate predictive analytics into the forecasting, budgeting and planning processes, and to put those forecasts in the hands of senior management (Figure 5).

**Figure 5: Integration of Predictive Technologies into Forecasts**



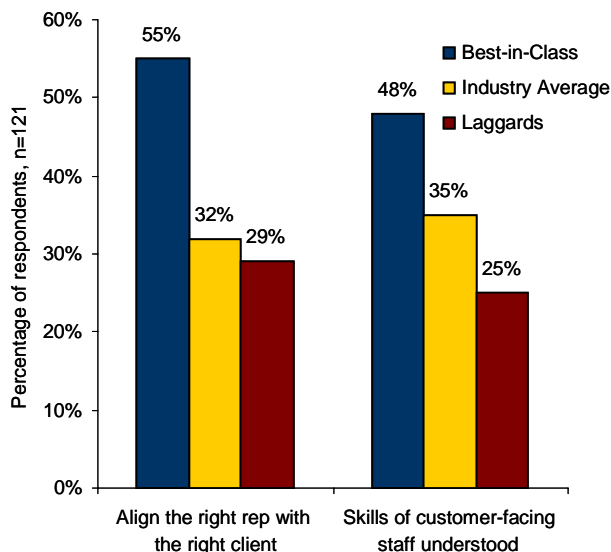
Source: Aberdeen Group, September 2010

Forecasts generated in this way can shape forecasts of future sales and revenue, which can in turn be used to determine the costs structure of the organization, the appropriate allocation of budgets and resources, in addition to manufacturing and inventory levels.

**Organization**

Three organizational characteristics stood out as important to enabling Best-in-Class performance. As we’ve already learned, using predictive analytics to drive scoring can be a powerful way to improve the effectiveness of sales and marketing activities. However, two organizational competencies are essential in order to fully capitalize on scoring – particularly for incoming traffic to a call center (Figure 6).

**Figure 6: Alignment of Staff is Critical for Optimal Scoring**



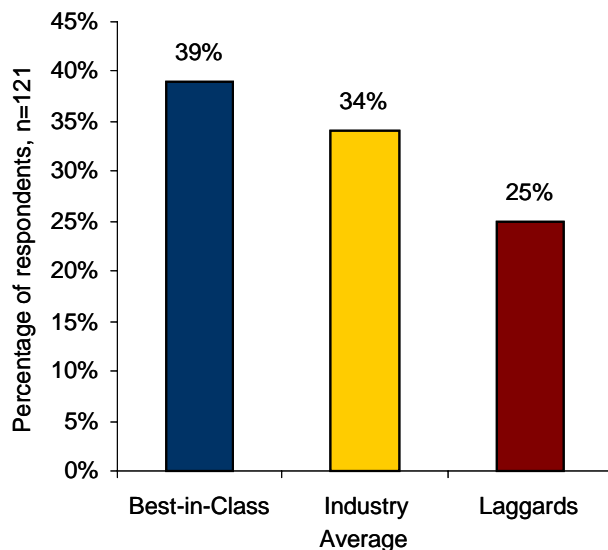
Source: Aberdeen Group, September 2010

When scoring is used to segment existing or potential customers based on the propensity to buy particular products or services, customers within each segment need to be channeled correctly. That is, all members of a segment should be directed to a specific sales representative, or sales team. Over half of Best-in-Class companies (55%) have the ability to align the right customer representative with the right client. In fact, Best-in-Class companies are almost twice as likely to be able to achieve this alignment, compared to Industry Average and Laggards firms.

In practice, this alignment can depend on many factors, depending on the situation. For example, businesses that sell to other businesses often sell a broad array of products which can be specialized and very technical. Think of medical devices, enterprise resource planning software, industrial machinery, aerospace and defense and so on. The same holds true for some businesses that sell to consumers, with some financial products being quite complex, for example. A specialized product needs a specialized sales representative (or team) to properly represent it and identify customer requirements that are a good match for the products capabilities. Such specialized staff are typically "narrow and deep," understanding just one or two products in intimate detail. To get the best return from marketing activities and promotions, it's key that these highly skilled staff are engaged with the customer as and when necessary, without undue delay.

However, this alignment of specific customers to specific staff can only be done well if the skills and ability of customer facing staff is well understood. While Best-in-Class companies lead the peers in this regard too, their understanding is not total. Only 87% of Best-in-Class organizations that attempt to align the right staff member with the right customer have such a thorough, documented understanding of their staff skills.

**Figure 7: Business Users Don't Needs Statistical Experts**



"We know that we have leads that inevitably drop out of the sales funnel. Lead scoring allows us to vet them out very quickly — before we invest too many resources."

~ Don Loonam,  
Senior vice president of sales, marketing and fulfillment, AccuQuote

Source: Aberdeen Group, September 2010

Best-in-Class enterprises are also more likely than their peers to have predictive tools that can be used by business staff without the need for a dedicated statistical modeling expert.

The use of self-service predictive and data mining capabilities can also speed the time to decision. If business managers need to resort to the use of a highly skilled, yet probably scarce individual whenever interpretation of data is required, that can cause delays and frustration in moving projects along. If business managers can use predictive tools interactively without assistance to develop and build insights it is likely they will be able to develop marketing campaigns faster and react more rapidly to changing business conditions.

Ease-of-use is also a key factor in driving the widespread adoption of data mining. The Aberdeen Group surveyed the barriers that companies faced to the adoption of predictive analytics. One of the top concerns, chosen by almost half of survey respondents (46%) was a lack of appropriate predictive analytics skills. Any predictive or data mining technology that can be used productively by employees that lack a deep technical understanding of either software tools or statistical methods will naturally foster and encourage the more widespread use of predictive analytics and data. Ensuring that tools can be easily used by business managers can help to make sure that data mining is used in all situations where it can be productive.

### Case Study — Sullivan Tire

Sullivan Tire and Auto Service operates 51 retail tire and auto service facilities, 14 commercial facilities plus wholesales distribution centers throughout the New England region of the USA. Family-owned, Sullivan Tire has been in business for 55 years and employees approximately 1,000 people.

The company has consistently invested in marketing for the retail business through local TV and radio advertising. Postcard mailers were also used too. But, Sullivan Tire also had a wealth of customer data which it wanted to exploit to increase traffic to its retail locations, and also generate more revenue from each customer visit via cross-selling. For example, some customers would only come in every couple of years when they needed new tires. Yet, the company offered many additional services, such as brake servicing and shock absorber replacement that could also be provided - either during a tire change or at other times throughout the year.

To make the most of their internal database, Sullivan Tire worked with a provider of predictive marketing services. The first step was to split the customer base into marketing segments based on buyer behavior.

*continued*

### Case Study — Sullivan Tire

As Mike Panarelli, Database Manager at Sullivan Tire said, “I needed to know a lot more about my database before I even did anything. By breaking customers up into different segments, I was able to see which customers are loyal and strong, who only comes in occasionally, and also identify who I can likely turn into a loyal customer who uses more services and comes in more frequently.”

One of the first applications of this analysis was to improve the timing of postcards to customers. In the past, postcards had been sent on a pre-defined cycle, to promote a 3,000 mile oil change, for example. With deeper insights into customer behavior, the company could target more precisely and reach the right customer at the right time with the right message. Panarelli continued, “I was able to shave costs, but it’s really a much smarter way of using the money. The first mailing we did we had a response rate of 9%. But, with better targeting we were able to get the response rate up into the high teens in some months.” Reports and analytics also let Panarelli see how customers are migrating between market segments, and what the impact is on the business. For example, one cross-selling campaign showed an increase of around \$40 per order over the control group.

Early successes have led to a change in marketing philosophy. Marketing used to be store-centric, focused on helping particular stores that needed to increase sales, for example. Marketing is now customer-centric, and focused on the needs and behaviors of the individual customer. Customers are targeted with information specifically about their own local store, and offered different services and price points, all driven by predictive analytics.

### Knowledge Management

Aberdeen asked survey respondents about access to four specific classes of data. These types of data were seen as potentially playing a pivotal role in the effective and productive use of data mining. The four classes considered include:

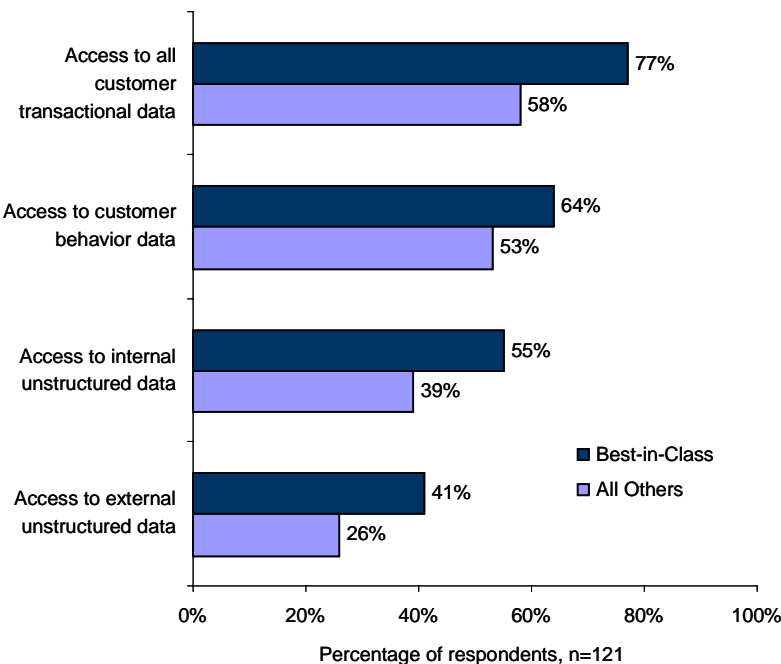
1. Customer transactional data. This could include basic demographic information, data on order and payment history, and forms completed on a website, for example.
2. Customer behavioral data. Included here would be data on a customer's (or prospect's) response to marketing campaigns, data on webpage navigation and usage, call center history, and so on.
3. Internal unstructured data. Unstructured data includes any type of data that does not fit into a pre-arranged format or structure (such as a relational database). For many companies, the most common form of unstructured data would include text documents and presentations. In this context however, the most relevant internal

unstructured data is often the record of dialogues between employees and customers arising from call centers or service centers. These text records may be either email or chat conversations, or transcripts of audio recordings.

4. External unstructured data. Most external unstructured data would take the form of social media. As such, it would include blog, third-party website, and social network mentions of a company or its products and services.

Figure 8 shows that Best-in-Class organizations are more likely than all others to have access to all four types of data.

**Figure 8: Access to Rich Customer Data is Critical to Success**



Source: Aberdeen Group, September 2010

Access to a rich set of customer-related data can improve sales and marketing performance in several ways - modeling lifetime customer value, driving superior market segmentation, and prioritizing inbound sales leads, for example.

Insights can also be found in the mass of transactional data that most organizations accumulate. For example, many companies that manufacture and sell products to other businesses will have a computerized record of which customer bought which products and when. Most likely, they will also have a record of trouble tickets and support requests for each of those customers too. Mining these sources can give rise to many insights that can help to drive marketing segmentation, for instance.

**Fast Facts**

- ✓ Only 41% of Laggards have CRM software in place, compared to 61% of Best-in-Class firms and 64% of Industry Average companies
- ✓ A CRM solution can provide a solid foundation of customer-centric data to guide sales and marketing activities

More advanced technologies, like text or sentiment analysis can be used to extract useful intelligence from internal unstructured data, such as emails, transcripts of customer services calls, or instant messaging chat. Fifty-five percent (55%) of Best-in-Class companies have access to this data, compared to just 39% of all others. External unstructured data would include blogs, product recommendations and customer feedback on third-party websites (such as amazon.com), and social network commentary on sites such as Facebook. Two-fifths (41%) of Best-in-Class firms are tapping into this emerging class of external data.

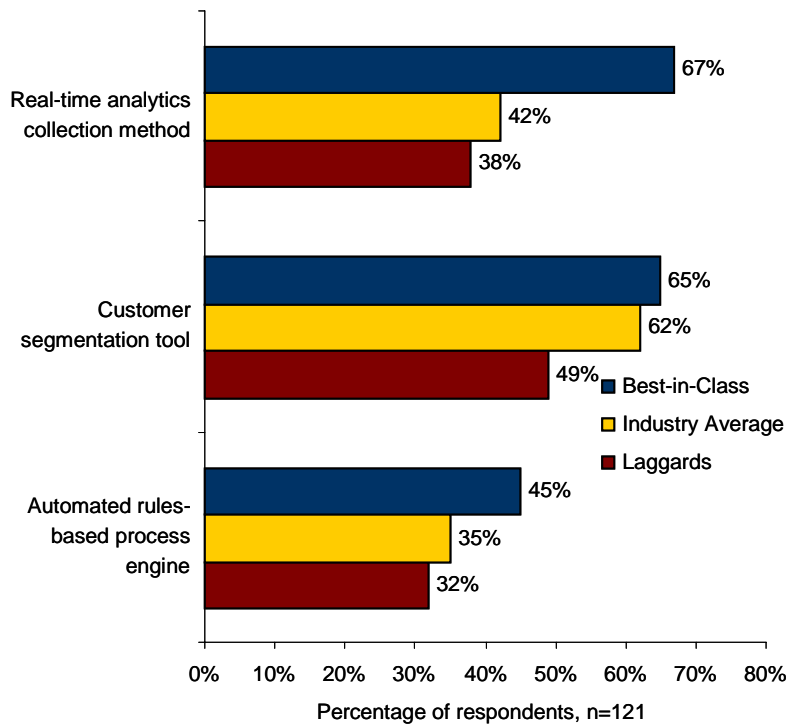
## **Technology**

Deployment approaches for predictive analytics technologies are compared in the “Aberdeen Insight – Technology” section at the end of this chapter. However, a number of related technologies that can leverage data mining were used more frequently by Best-in-Class enterprises in comparison to their peers (Figure 9).

First, two out of three (67%) Best-in-Class organizations collect data for analytics in real-time – and are over 50% more likely to do so than both Industry Average and Laggard companies. Collecting data for real-time analysis can be used to feed a number of sales and marketing applications. Real-time lead scoring (as described in the AccuQuote case study) is one example. Information, such as demographics and purchase intentions can be collected using a web form. Behavioral data, based on website navigation, can be added into the mix. Predictive analytics software can then be used to provide a score to prioritize a lead, or direct the lead to the right sales specialist. Specialist staff might be used for the sale of particular products (such as mortgages), or in special situations, such as retention of customers that are about to defect. Rules based process engines also factor here too. Such technologies can be used to implement the workflow and routing required for this type of prioritization.

Customer segmentation tools are also being used more widely by both Best-in-Class and Industry Average organizations in comparison to Laggard organizations. Customer segmentation is concerned with separating customers and prospects into groups that have different characteristics. Good segmentation performs that separation based on different *buying characteristics* so that particular sales objectives can be met. These objectives could simply be increasing sales revenue, increasing sales volume – or both. More sophisticated segmentation involves the use of predictive analytics and data mining. Examples would include a focus on acquiring customers predicted to have a high lifetime value, or studiously avoiding customers that were likely to default on scheduled payments at some point in the future.

**Figure 9: Real-time Capabilities Enhance Data Mining**



Source: Aberdeen Group, September 2010

**Fast Facts**

√ The top three selection criteria used when choosing a vendor of predictive analytics software are ease of integration with enterprise applications (46%), ease of use (37%) and proof of return on investment (36%)

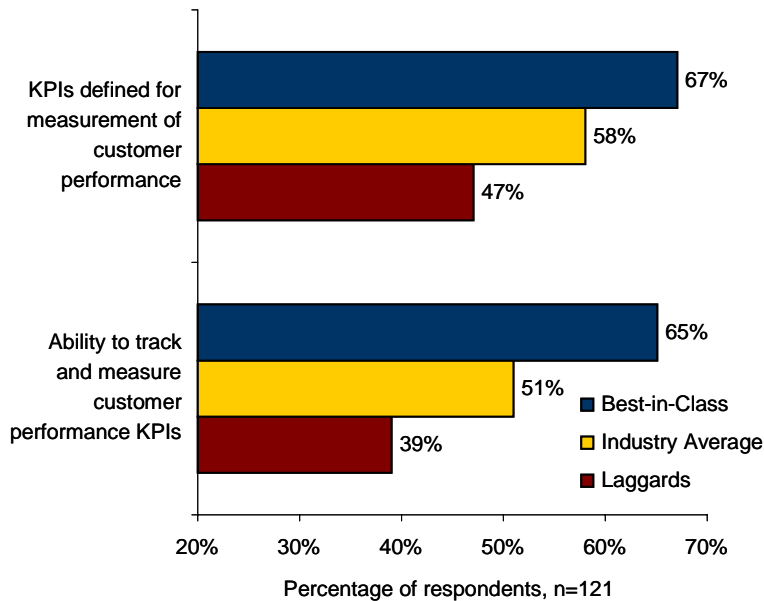
**Performance Management**

Aberdeen's research survey included questions to determine how companies measure and monitor the performance of their predictive analytics technologies. The capabilities that are prioritized by top performers are customer-focused (Figure 10).

Sixty-seven percent (67%) of Best-in-Class companies have defined metrics to measure customer performance. Further, almost all Best-in-Class companies that have defined those metrics actively track and monitor them (65% vs. 67%). What is more noteworthy perhaps is how many other companies have also defined those metrics yet fail to track them.

For example, while 47% of Laggards have defined customer-centric performance KPIs, only 83% of those organizations also track those metrics (39% compared to 47%). The same trend is true – to a lesser extent – of Industry Average enterprises. This is indicative of an incomplete or immature approach to management of predictive technologies. Defining metrics is worthless if nobody is going to pay attention to them and take corrective action when necessary.

**Figure 10: Customer-focused Performance Measures**



“By breaking customers up into different segments, I was able to see which customers are loyal and strong, who only comes in occasionally, and also identify who I can likely turn into a loyal customer who uses more services and comes in more frequently.”

~ Mike Panarelli,  
Database Manager,  
Sullivan Tire

Source: Aberdeen Group, September 2010

A huge variety of metrics can be used to gauge customer performance, depending on the exact situation and requirements. For sales and marketing, likely metrics could include growth in incremental sales, follow-on sales (additional sales to existing customers), pipeline growth as well as customer retention.

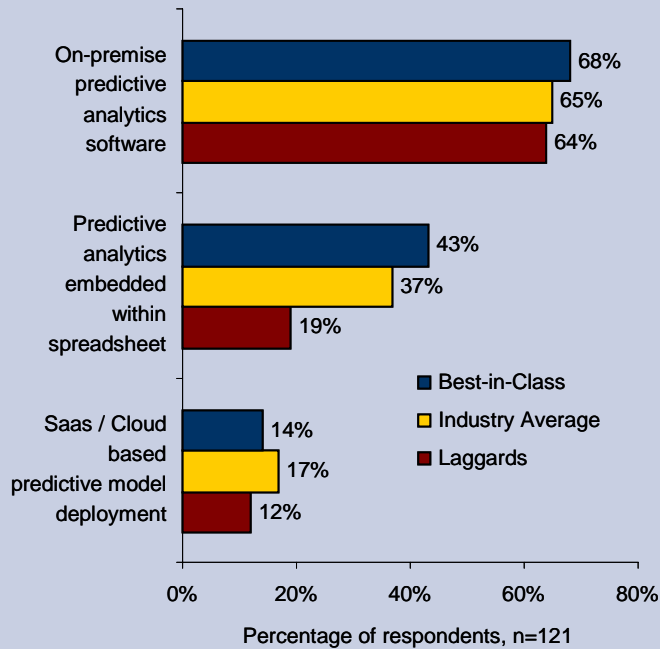
**Aberdeen Insights — Technology**

Aberdeen’s research survey considered three basic approaches to the deployment of predictive analytics (Figure 11). Companies in every maturity class employ predictive analytics software that is installed on premise almost equally. But, there are some differences when other deployment approaches are considered. Both Best-in-Class and Industry Average organizations are twice as likely as Laggard companies to use predictive technology embedded within a spreadsheet. This can be a great way to harness the power of data mining – as long as scalability is carefully considered and managed.

*continued*

**Aberdeen Insights — Technology**

**Figure 11: Predictive Analytics Deployment Strategies**



Source: Aberdeen Group, September 2010

In the spreadsheets favor, most knowledge workers that are even remotely IT-savvy are familiar with spreadsheet tools and their user interface. Building predictive capabilities on this foundation can help to minimize any learning curve required. Secondly, almost any type of data can be loaded into a spreadsheet for analysis. Truth be told, spreadsheets are the data integration tool of choice for the financially challenged. Third, many knowledge workers probably already have a license for spreadsheet software – even if they don’t currently use it.

The most significant disadvantage of spreadsheets is that when more than a couple of users are involved it’s a solution that becomes difficult to scale and manage, with potentially thousands of individual spreadsheets being created. Spreadsheets don’t inherently foster sharing and collaboration either. However, SaaS and cloud-based deployments can help address this.

Some companies have already ventured into a SaaS deployment of predictive models. With the SaaS approach, both data mining software and the data that is analyzed are hosted on third-party computing infrastructure beyond the companies firewall. Access and manipulation of the predictive model is via the internet.

*continued*

### Aberdeen Insights — Technology

Cloud-based deployment is similar to SaaS, but generally only part (not all) of the solution is hosted outside the firewall. For example, a company might choose to host the data mining software locally on its corporate IT infrastructure, but store data on a third-party cloud infrastructure. This can be a very cost effective way to manage massive data volumes or to implement a solution that is only needed periodically – such as a model for predicting sales volume during the Christmas holiday. SaaS or cloud deployments can also be a good way to manage data mining capabilities implemented within a spreadsheet. If spreadsheets and data are stored securely by the service provider, the solution can become much easier to manage and scale. Sharing and collaboration becomes easier too if all data and analysis are stored in a single central location.

Adoption of the SaaS deployment approach is set to grow, with Best-in-Class organizations leading the way. While 14% of these top performing companies currently use SaaS deployment, a further 14% are planning to do so in the next 12 months.

## Chapter Three: Required Actions

Whether a company is trying to move its performance in the use of predictive analytics and data mining 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

- **Consider introducing a team that is dedicated to discovering new customer insights.** Almost two-thirds (64%) of Best-in-Class companies employ a team that is devoted to gaining a deeper understanding of their customers. By contrast, less than one-third (31%) of Laggard organizations do that same. Laggards should ensure that a regular, systematic process is established to grow and maintain a deeper understanding of customers, their motivations and buying patterns. Developing a deeper understanding of customers and their needs can grow sales, increase customer retention and improve profitability.
- **Investigate the benefits of CRM software.** CRM software can provide a solid foundation of basic customer intelligence. Laggard companies are, however, notably lacking in CRM implementations compared to other organizations. Just 41% of Laggards possess a CRM solution, partly explaining why these organizations also often lack access to customer transactional data. The data maintained in a well implemented CRM system can be used to fuel and optimize a host of sales and marketing activities.
- **Improve access to external unstructured data.** External unstructured data, such as blogs, wikis and social media websites, can increasingly provide rich and detailed insights into the perceptions of customers and potential customers. These insights can be used to drive customer segmentation, shape marketing programs and fine tune product offers. Only 22% of Laggards have access to external unstructured data, compared to 41% of Best-in-Class enterprises.
- **Define and track metrics for customer success.** Sixty-seven percent (67%) of Best-in-Class companies have metrics in place to measure customer performance. Similarly, 65% of Best-in-Class firms routinely track and monitor those metrics. In comparison, only 47% of Laggards have such metrics defined, and only 39% regularly monitor those metrics. Without defining and monitoring metrics to measure customer performance, the impact of specific sales and marketing campaigns cannot be clearly understood and directed.

### Fast Facts

- √ Best-in-Class companies grew their operating profit margins by 9% in the last year, compared to 5% for Industry Average organizations and 3% for 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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- **Consider introducing a team that is dedicated to discovering new customer insights.** Sixty-four percent (64%) of Best-in-Class companies have a team that is devoted to gaining new insights into their customers. However, only 31% of Industry Average organizations use that same tactic. Industry Average companies are particularly concerned about the cost of customer acquisition, with 28% citing that as a top business pressure. Improving insights into customers and prospects can help to target marketing and reduce the average cost of customer acquisition.
- **Improve the ability to align the right company representative to the right customer, where appropriate.** Best-in-Class companies are significantly more likely to be able to achieve this alignment than Industry Average organizations (55% compared to 34%). Predictive analytics can be used to prioritize sales leads, for example, assigning the leads most likely to convert into sales to the best sales representatives, or directing the lead to a product specialist based on a prediction of which product someone is most likely to buy. Providing superior customer sales and service aids customer retention, can increase sales and ultimately grow profit margins.
- **Understand the skills and talents of customer facing staff.** This is a necessary step for optimizing the alignment of the right customer representative with the right customer. Unless the skills, talents and competencies of individual staff members and teams are well understood, this alignment cannot be optimal. While 47% of Best-in-Class organizations have this knowledge, only 30% of Industry Average organizations possess it. Ensuring that an inventory of staff skills and experience is kept up-to-date is a necessary step when organizations are trying to direct sales leads to the most appropriate employees.

## Best-in-Class Steps to Success

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- **Ensure business staff are able to use predictive tools without a statistical expert.** While this is a Best-in-Class capability, only 39% of Best-in-Class companies indicate that their business managers are able to use their predictive analytics tools without the assistance of a statistical expert. The right mix of statistical skills and software savvy can be a rare, hard to find, combination. Tools that require such a combination then implicitly erect a barrier that can impede the adoption of data mining tools and also un-necessarily lengthen the time required to formulate strategy, develop marketing plans and execute marketing strategy. Providing business managers with tools that they can use directly in an interactive way can cut the time to decision and grow the company's ability to response quickly to changing business decisions.

- **Integrate predictive analytics into the forecasting process.** Although Best-in-Class companies are nearly twice as likely as Laggards to feed insights from predictive models into the planning and forecasting process, only 43% of those top performing organizations currently do so. Predictive analytics is often used in relative isolation, to drive discrete business process or provide insights into a single area of the business. Plugging the results of data mining more broadly into business management could provide more accurate revenue forecasts and tighter control of inventory and working capital, for example.
- **Improve access to both internal and external unstructured data.** Fifty-five percent (55%) of Best-in-Class companies have access to internal unstructured data, with 41% having access to external unstructured data. The sheer volume of unstructured data is growing at a tremendous rate which can make insights hard to find. However, text analytics and sentiment analysis software can help to distill findings and Best-in-Class firms should strive to make unstructured data available to their sales and marketing managers.

#### Aberdeen Insights — Summary

It's stating the obvious, but I'll state it anyway. Predictive analytics applications in sales and marketing are fundamentally dependent on high quality data. Best-in-Class companies have a stronger foundation of data. These organizations have better access to both customer transactional data and behavioral data, in addition to unstructured data too.

Building on this foundation, the Best-in-Class employ a dedicated team to enhance their understanding of their customers, build unique customer profiles and optimize the performance of the sales and marketing operations. Ultimately, this enables the Best-in-Class to enjoy higher profit margins and higher customer retention rates.

## Appendix A: Research Methodology

Between January and September 2010, Aberdeen examined the use, the experiences, and the intentions of more than 121 enterprises using predictive analytics and data mining for sales and marketing applications in a diverse set of enterprises.

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

Responding enterprises included the following:

- *Job title:* The research sample included respondents with the following job titles: CEO / President (20%); Manager (19%); EVP / SVP / VP (14%); Director (13%); Staff (10%); and Consultant (11%).
- *Department / function:* The research sample included respondents from the following departments or functions: marketing (21%); business development / sales (20%); IT (15%); corporate management (9%); and finance / administration (7%).
- *Industry:* The research sample included respondents from the following industries: IT consulting / services (22%); education (13%); software (15%); financial services (10%); retail (8%); market research (7%); media / public relations (5%); industrial product manufacturing (5%); other (16%).
- *Geography:* The majority of respondents (65%) were from North America. Remaining respondents were from Europe (22%), the Asia-Pacific region (9%), the Middle East / Africa (2%) and South / Central America (2%).
- *Company size:* Thirty-two percent (33%) of respondents were from large enterprises (annual revenues above US \$1 billion); 19% were from midsize enterprises (annual revenues between \$50 million and \$1 billion); and 48% of respondents were from small businesses (annual revenues of \$50 million or less).
- *Headcount:* Forty-four percent (43%) of respondents were from large enterprises (headcount greater than 1,000 employees); 22% were from midsize enterprises (headcount between 100 and 999 employees); and 35% of respondents were from small businesses (headcount between 1 and 99 employees).

### Study Focus

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

- √ The degree to which predictive analytics and data mining are deployed in the sales and marketing operations and the financial implications of the technology
- √ Current and planned use of predictive analytics to aid sales and marketing activities
- √ The benefits to sales and marketing, if any, that have been derived from data mining initiatives

The study aimed to identify emerging best practices for data mining and predictive analytics 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, September 2010

**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, September 2010

**Table 6: The 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, September 2010

## Appendix B: Related Aberdeen Research

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

- [Operational Intelligence: Boosting Performance with "Right-Time" Insight](#); August 2010
- [Fast, Affordable, Agile - The Case for SaaS BI](#); August 2010
- [Lead and Customer Scoring - Best Practices for Growing Profitability](#); August 2010
- [Operational Performance Visibility: Improving Decision Timeliness and Accuracy](#); July 2010
- [Self-Service BI: Empowering the Line-of-Business Manager](#); May 2010
- [The TCO View of Business Intelligence](#); April 2010
- [Predictive Analytics: The Right Tool for Tough Times](#); February 2010
- [The Economic Outlook for 2010: High Growth? Low Growth? No Growth?](#); December 2009
- [Risk Aversion Leads to Predictive Analytics](#); November 2009

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

**Author: David White, Sr. Research Analyst, Business Intelligence,**  
[\(david.white@aberdeen.com\)](mailto:david.white@aberdeen.com)

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