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MOVING BEYOND BASIC BI

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ABERDEEN

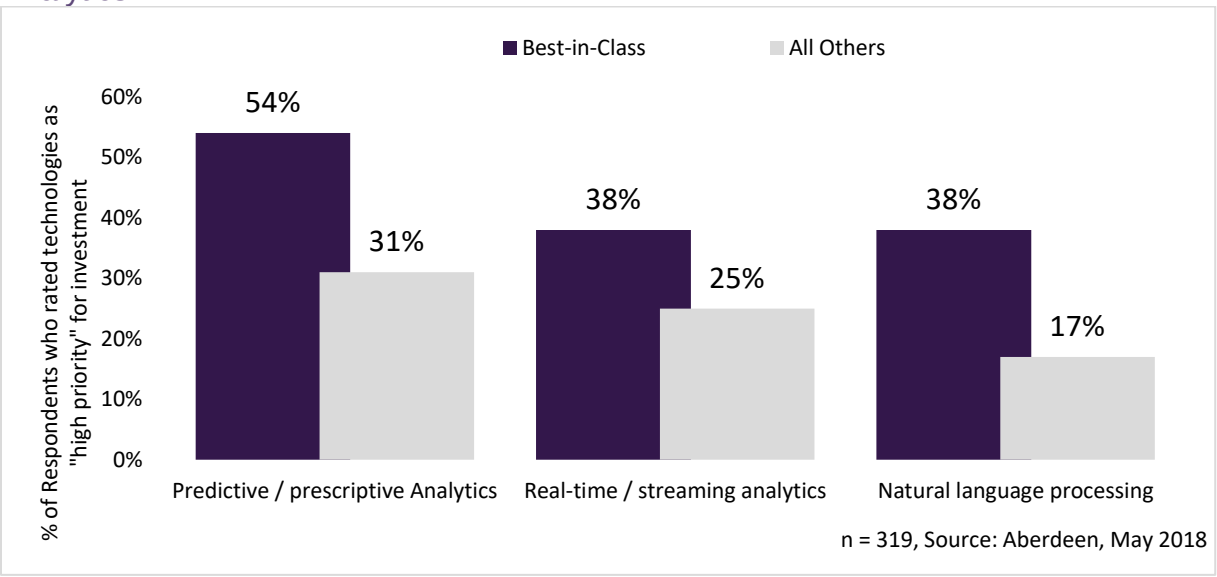
The ubiquity of data for the modern business makes it incumbent on firms to adopt some form of analytical solution, but not all BI solutions are created equal. This knowledge brief details the key BI components and capabilities that Best-in-Class companies leverage to keep ahead of the competition.

Moving Beyond the Basics

The river of data that flows through a modern organization is larger, more diverse, and more complex than ever before. The pervasiveness of these data, in all their forms, can be overwhelming for companies that aim to make sense of and drive actionable decisions from it. Recent Aberdeen research has shown that one avenue Best-in-Class firms are taking to get a hold of and make sense of their data is by implementing an enterprise-wide BI (business intelligence) analytics solution (Figure 1).

This research has also shown that a feature of paramount importance for Best-in-Class firms is the ease of use of such a solution. Firms are seeking a product that enables non-technical users to explore data quickly and easily and provides compelling and interpretable visualizations to any insights that may be gleaned.

Figure 1: Top Companies Prioritize BI Analytics and Advanced Analytics

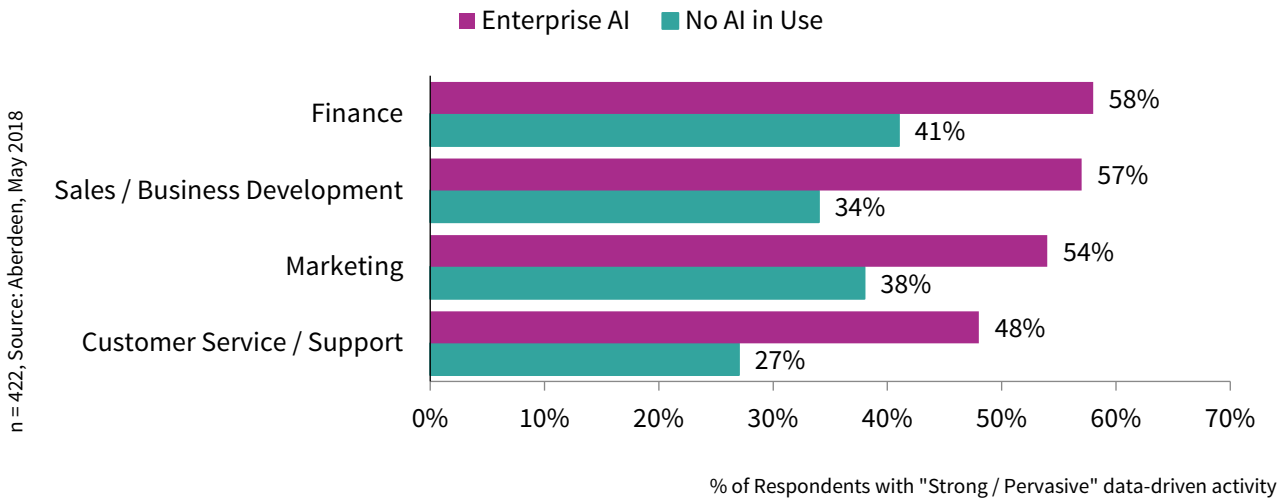


The disparity between Best-in-Class firms and All Others comes not from the ability to visualize their data in the most basic form, but in the ability to apply the most advanced analytic techniques, such as predictive and prescriptive analytics. Although these advanced methods were once relegated to bona fide data scientists and statisticians, the best BI solutions (those with high adoption rates for leading organizations) make them available to laypersons across the enterprise through a guided experience or interface. The integration of cognitive AI capabilities has made these wishes a reality.

Take for example a business analyst that wants to understand recent trends in revenue of a particular product line. A user simply types in the kind of data they wish to understand, and the solution not only seeks out these data across the enterprise (through natural language understanding), but also provides a recommended list of "best-practice" techniques and / or models (such as neural nets and random forests) to analyze and interpret these data. Moreover, such a solution will provide an intelligible and easily digestible interpretation, by means of NLG (natural language generation), of the results for the least technically-savvy to comprehend.

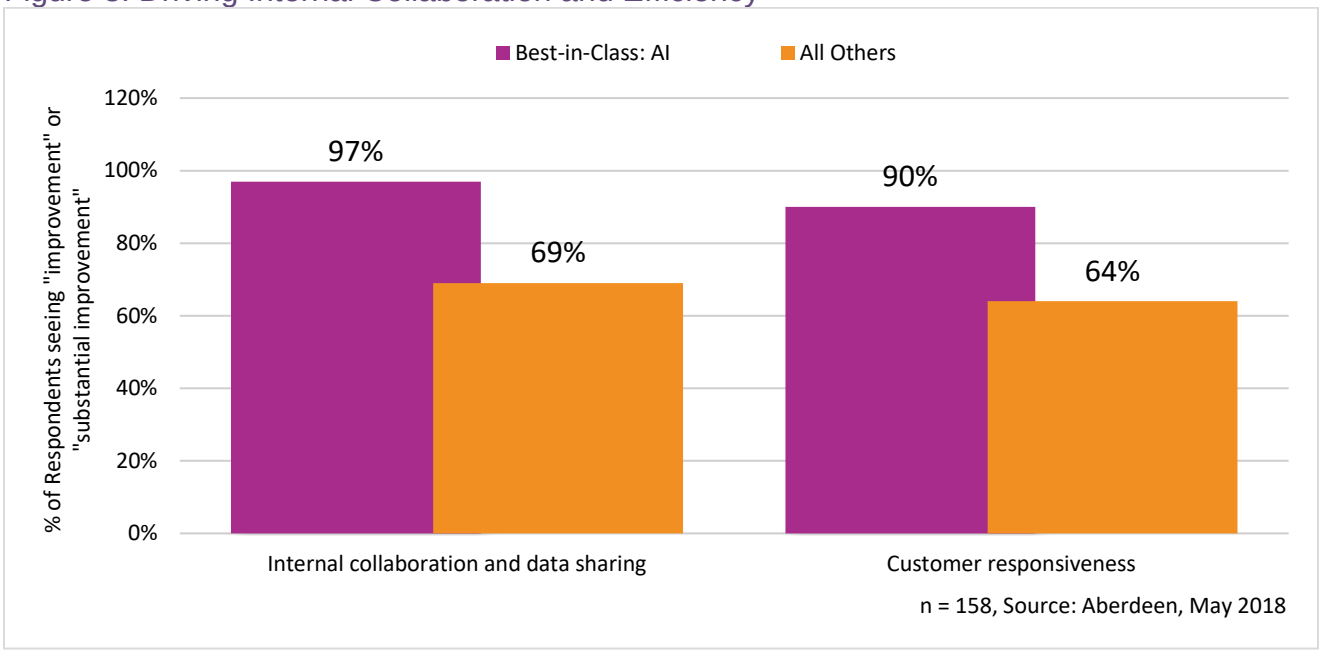
Although much of what has been stated may seem like science fiction, it is increasingly the reality for Best-in-Class organizations. These firms have taken it a step further by integrating all disparate data from different platforms across the organization, such as planning and processing, and using machine learning and deep learning algorithms to find and manage the "unknown unknowns." These algorithms parse through the vast swath of available data, and not only derive questions that most users would never have conceived of asking but provide answers to those questions in the same instance. These models only become more accurate as they are trained and validated over time.

Figure 2: Creating a Data-driven Culture



It is not enough for a single user to explore the capabilities of a such a solution. An enterprise-wide adoption invariably creates a data-driven culture within the organization (Figure 2). Best-in-class firms that implement enterprise-wide AI see marked increases in data-driven activity across all divisions, from finance to customer service / support. Those employing elements of AI in their data-drive decision processes can connect a broader array of users with a wider variety of data to support more enriched and informed decisions. Fostering such a strong data-driven and analytical culture also drives internal efficiencies that help to circulate information more effectively and respond to customers in a timelier manner (Figure 3).

Figure 3: Driving Internal Collaboration and Efficiency



The Results

Best-in-Class companies are not only forward-thinking in the use of their technology, but also in the way they structure their organizations to support the use of that technology. With a strong foundation of data-driven activity, top companies can exploit the power of the best BI solutions available and deliver tangible results to their organization. Best-in-Class firms achieve year-over-year increases in operating profit and organic revenue growth that are roughly 100% and 33% greater than All Others, respectively.

Table 1: Best-in-Class performance metrics

Performance Metrics: Year-over-year	Best-in-Class: AI	All Others	Performance Difference
Organic Revenue Growth	**15%**	**14%**	**+ 7%**
% Change in Operating Profit	**11%**	**7%**	**+ 57%**

Key Takeaways and Recommendations

The amount of data that moves through an organization is larger than ever, and only growing by the day. Although the ubiquity of these data is staggering, Best-in-Class companies are the vanguard of adopting BI solutions that are capable of aggregating, analyzing and interpreting these data. Aberdeen recommends the following for firms that aim to get the most of their data:

- **Ensure the BI analytical solution is easy to use.** Although many Best-in-Class organizations have teams dedicated to data analysis, they also ensure that the least-technical within the organization have the capacity to ask questions of, interpret, and visualize data in meaningful ways. It is of paramount importance that a BI solution also has the capability to make the most advanced analytic techniques not only available, but easily interpretable for the most basic of users.
- **Integrate multiple platforms with disparate data.** The best insights that drive informed decisions often do not come from analyzing data within the silo where it is held. These insights come from integrating all sources of data, from financials to performance, and analyzing them in tandem.
- **Understand and implement AI, machine learning and deep learning capabilities.** These capabilities will increasingly become the norm across all industries. The sooner your organization wraps its head around their possibilities, the sooner they can be unleashed to discover new insights and increase performance.

About Aberdeen Group

Since 1988, Aberdeen Group has published research that helps businesses worldwide to improve their performance. Our analysts derive fact-based, vendor-neutral insights from a proprietary analytical framework, which identifies Best-in-Class organizations from primary research conducted with industry practitioners. The resulting research content is used by hundreds of thousands of business professionals to drive smarter decision-making and improve business strategies. Aberdeen Group is headquartered in Waltham, Massachusetts, USA.