

WINTER IS NOT COMING: ELIMINATING DATA SILOS AND ENDING INFORMATION HOARDING

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Report Highlights

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Top performers tackle the problem of data silos.

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Data silos hinder BI users.

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Data silos kill data-driven decision-making.

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Best-in-Class practices for proliferating relevant information.

This report examines the pressing need to break down data silos due to the damage they cause to analytical initiatives and user engagement.

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Data does not need to be hoarded and packed away so that only a select few can use it. Despite this obvious reality, many organizations still struggle with data silos and cultures of data ownership.

Aberdeen defines Best-in-Class organizations (the top 20% of performers), Industry Average (middle 50%), and Laggards (bottom 30%) based on the following metrics:

- Improvement in organic revenue year-over-year
- Improvement in operating profit year-over-year
- Improvement in searchable/discoverable data year-over-year

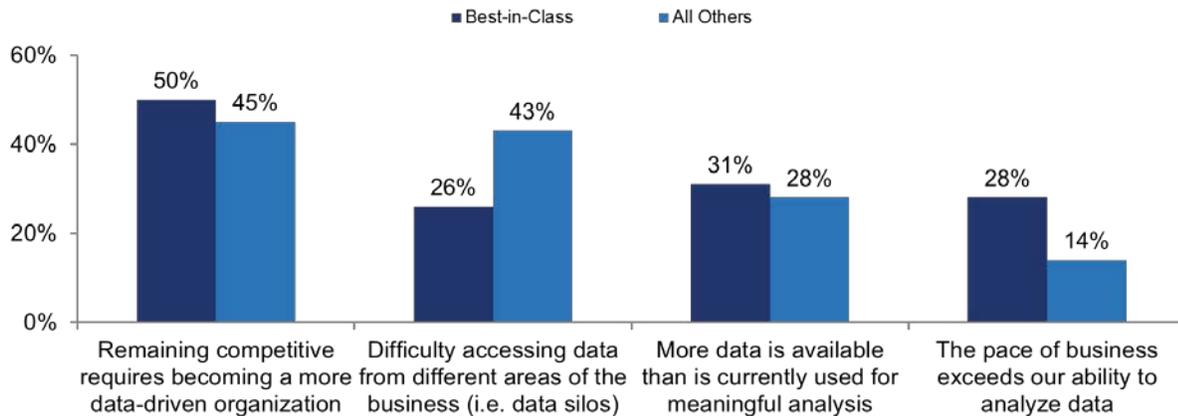
A time of hardship and scarcity is not descending upon the world of Business Intelligence (BI). Wild bands of analytical marauders are not gathering to storm and destroy the realms of database administrators. Data does not need to be hoarded and packed away so that only a select few can use it. Despite this obvious reality, many organizations still struggle with data silos and cultures of data ownership. Data sits behind high walls in different departments and business units, inaccessible to outsiders. This problem is often caused by a failure of technology, but it can also be caused database administrators' detrimental sense of proprietorship. The Aberdeen Group identified 189 organizations in its 2015 Business Analytics survey that are currently struggling with limited data access due to data silos. This report examines the harm siloed information does to analytical organizations and presents the best practices of top performers to eliminate data silos and end cultures of information ownership.

Top Performers Address the Data Silo Problem

Aberdeen created a maturity framework to distinguish top performing organizations (see sidebar). Best-in-Class organizations (the top 20% of performers) reported a set of pressures that are driving analytical initiatives and investment (Figure 1). Regardless of performance, many organizations recognize that they need to become more data driven. Even experienced executives with well-honed instincts know that analytics are the key to keeping up with the competition. Organizations are investing to bring analytics to bear on all aspects of their operations.

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Figure 1: Analytical Pressures



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Source: Aberdeen Group, June 2015

However, Best-in-Class organizations are 40% less likely than All Others to be hampered by data silos. Top performers have taken action to break down silos and create analytical cultures where information is shared. This requires identifying problem areas and empowering individuals to free up data and loosen the grip of database administrators with a perverse sense of information ownership.

Having made some headway with the data silo problem, the Best-in-Class are focused on the volume of their business data and the pace of business. They need tools and talent to derive insights from huge volumes of data. BI users should be leveraging as much relevant data as possible. Even organizations that have successfully broken down data silos may struggle to take full advantage of their vast amount of data. But Big Data analysis should not be achieved at the expense of time. Seventy-nine percent (79%) of survey respondents reported that they have to make decisions faster than ever before. The Best-in-Class have freed their data, but must also analyze it in time to keep up with the demands of daily operations. Aberdeen’s report, *There*

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→ Related Research:

“There will be Blood: Pain Points in Analytics”

The damage of data silos can be seen in the experience of analytics users.

will be Blood: Pain Points in Analytics (July 2015), offers additional insight into the pressures that drive new BI investment and initiatives.

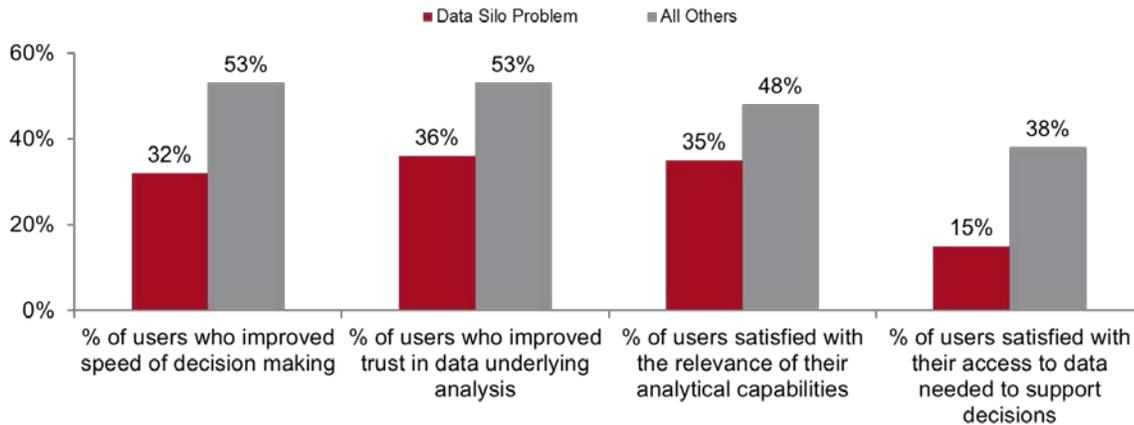
Damage Report

Aberdeen isolated those organizations that reported difficulty accessing data in different areas of the business in order to assess the impact of data silos. The damage of data silos can be seen in the experience of analytics users (Figure 2). Data silos impede BI users from improving the speed of their decisions. Decision-makers want to be more data driven and take advantage of their analytical resources. However, when they slam into data silos, they are forced to wait for access or come up with other ways to supplement their analysis. This causes stagnant or declining decision speeds at a time when many organizations feel pressured to act faster.

Data silos also harm improvements in data trust. Users who regularly come up against data silos know that the data they do have does not represent the most complete picture of reality and that their analysis would benefit from integrating additional data sources. Their own information may be siloed and consequently out of date or inaccurate. Data silos damage users’ faith in their own analysis.

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Figure 2: Silos Damage the User Experience



n=547

Source: Aberdeen Group, June 2015

Data silos also contribute to significantly lower user satisfaction. Organizations with a data silo problem have 27% fewer users per capita who are satisfied with the relevance of their analytical capabilities. Users dealing with data silos can't get to some of the data that will help them do their jobs. They are forced to work with incomplete information and have to dig through irrelevant data when seeking insight.

Just 15% of users operating in organizations with a data silo problem are currently satisfied with their data access. Users know there is data within the organization that could help them and are routinely frustrated by their inability to incorporate siloed information into analysis. With such low overall satisfaction rates, data access is an issue that demands attention regardless of whether or not an organization has reported a data silo problem.

Further Damage

Data silos also hinder the development of data-driven cultures (Figure 3). BI users operating in organizations with data silo

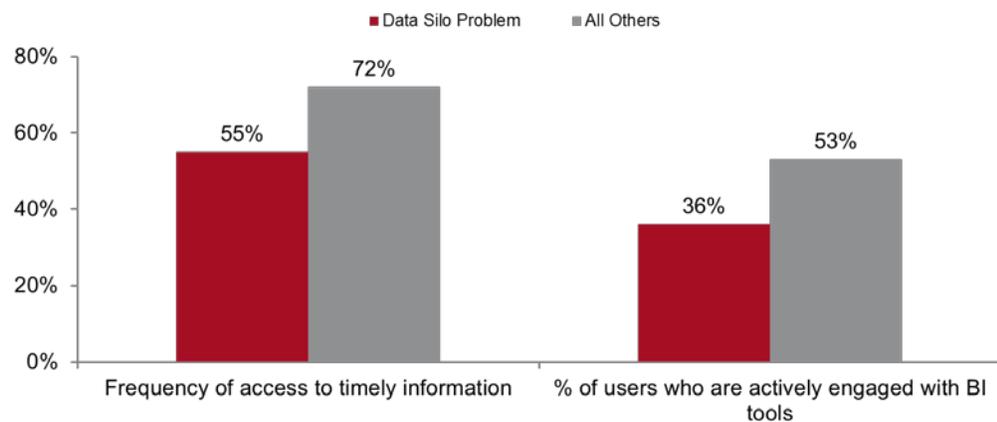
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Far too often, users are deterred by a data silo and give up their analytical inquiry entirely.

problems were only able to obtain information within the decision window 55% of the time. When users come up against siloed information, they either have to wait for access or find another approach to their analysis. Such measures are time consuming, and users repeatedly find themselves coming up against shortening decision windows. Far too often, users are deterred by a data silo and give up their analytical inquiry entirely. Time-sensitive decisions are made based on a combination of incomplete information and instinct; nearly half of all decisions have to be based on incomplete information. The gaps are then filled by the experience and instincts of the decision-maker, which are simply not as reliable as hard data.

Figure 3: Silos Force Decisions Without Data



n=547

Source: Aberdeen Group, June 2015

Aberdeen defines actively engaged users as those that use analytical tools on at least a weekly basis.

Organizations with data silo problems also reported having 32% fewer users per capita who are actively engaged with BI tools (see sidebar). Data silos hurt BI tool adoption as users fail to get all the information they need to do their jobs. Users who slam into walls in the course of data exploration will eventually abandon their analytical efforts and will be less inclined to

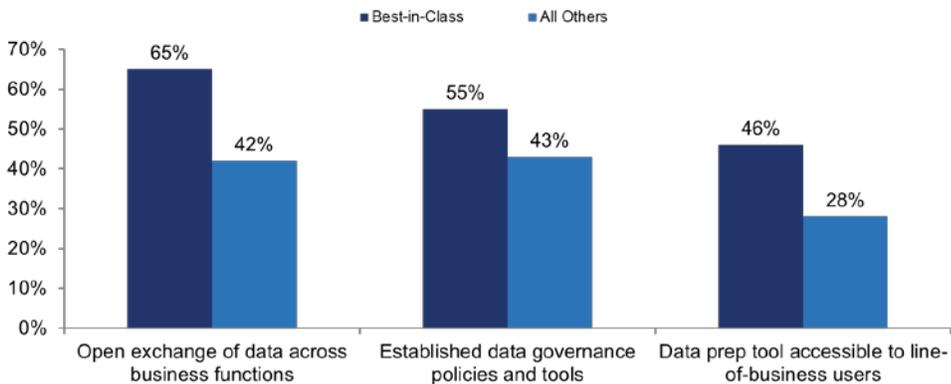
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incorporate data into their daily decision-making process. This leaves budding analytical cultures to wither and die with users who only engage BI tools sporadically.

Best Practices from the Best-in-Class

Best-in-Class organizations employ a set of capabilities and technologies to combat data silos (Figure 4). Nearly two-thirds of the Best-in-Class have achieved an open exchange of data across business functions. These organizations invest in the right technology and actively foster a culture of collaboration and data sharing. Users should be encouraged to seek out data beyond their immediate purview, and database administrators should grant access whenever appropriate and seek out analytical teams that may benefit from the information under their care.

Figure 4: Best-in-Class Capabilities and Technology



n=270

Source: Aberdeen Group, June 2015

The exchange of information should not go unchecked, however. The Best-in-Class are more likely to have policies and tools in place to ensure data governance. There are times when data should remain behind a high wall, such as when dealing with

Nearly two-thirds of the Best-in-Class have achieved an open exchange of data across business functions.

There are times when data should remain behind a high wall, such as when dealing with sensitive financial information and proprietary product data.

→ [Related Research:](#)

“Data Prep Tools for the Line of Business”

sensitive financial information and proprietary product data. Strong data governance ensures compliance with any applicable regulations and bolsters security. Governance can also help hush statistical noise and steer users away from data that could muddle their analysis.

Finally, the Best-in-Class are 85% more likely than All Others to have a dedicated data prep tool that is accessible to the line of business. After data silos have been broken down, users need help to profile, cleanse, and integrate all the information at their disposal. The Best-in-Class are leading the way in empowering end users to independently prepare their data and reduce their reliance on IT. Aberdeen’s report, [Data Prep Tools for the Line of Business](#) (September 2015), details the numerous benefits of such tools.

[Key Takeaways](#)

Modern analytical organizations live in a time of plenty. Winter is not coming, and the most successful organizations have found a way to effectively and responsibly disseminate data across all departments and business units. Technology decision-makers and database administrators should bear in mind the dangers of data silos and the approach of the Best-in-Class to end cultures of data ownership:

→ **Top performers are breaking down data silos. All organizations are primarily focused on becoming more data driven to keep up with the competition.**

Best-in-Class organizations are 40% less likely to report problems with data silos. This enables them to focus on becoming more data driven across all operations and accelerating analytical processes to match the pace of business.

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- **Data silos harm the user experience.** Organizations with a data silo problem are less successful at improving the speed of decision-making and improving user trust in data. Users in these organizations are also voicing their dissatisfaction with their data access and the relevance of their analytical capabilities.
- **Data silos impede analytical decision-making and disengage users.** Organizations with a data silo problem are able to deliver information to users within the decision window only 55% of the time. This means organizations fail to respond to the pressure of keeping up with an accelerated pace of business. Also, compared to All Other survey respondents, organizations troubled by silos have 32% fewer BI users per capita who are actively engaged with tools.
- **The Best-in-Class enable the free exchange of data, governed data discovery, and data prep in the line of business.** The Best-in-Class are 55% more likely than All Others to have achieved an open exchange of data across business functions. Data is not haphazardly shared across the organization, however. The Best-in-Class are also significantly more likely to have tools and policies for data governance and data prep tools that are accessible to line-of-business users.

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For more information on this or other research topics, please visit www.aberdeen.com.

Related Research

[*Data Prep Tools for the Line of Business*](#); September 2015

[*There will be Blood: Pain Points in Analytics*](#); July 2015

[*Self-Service Analytics, the Cloud, and Just-in-Time Insight*](#); July 2015

[*The Landscape of Self-Service Analytics*](#); May 2015

[*The BI Tipping Point: Achieving an Epidemic of Analytics*](#); May 2015

[*Customer Data Governance for Better Sales and Marketing*](#); February 2015

[*Data Governance for the CFO: Guided Financial Excellence*](#); March 2015

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About Aberdeen Group

Since 1988, Aberdeen Group has published research that helps businesses worldwide improve their performance. Our analysts derive fact-based, vendor-agnostic 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 strategy. Aberdeen Group is headquartered in Boston, MA.

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