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DATA GOVERNANCE 2.0: UNITING PEOPLE AND INFORMATION TO DRIVE REAL BUSINESS RESULTS

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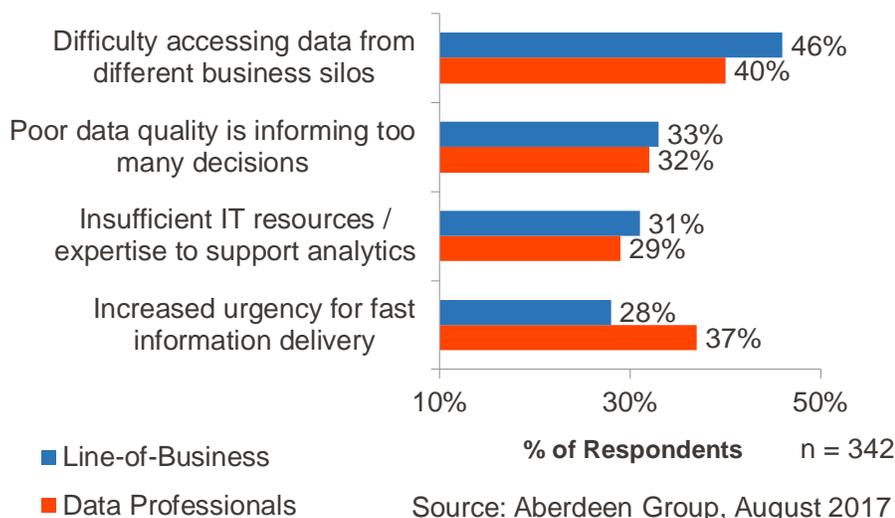Vice President & Principal Analyst, Analytics & Business Intelligence

ABERDEEN

As organizations seek to extract more strategic value from their data, many are starting to view data governance as an enabler of insight rather than an impediment to its creation. This report explores a leading approach to data governance and the impact it can have on today's most data-rich organizations.

A Growing Thirst for Better Data

There was a time when only IT professionals and those close to the data exerted any significant energy towards managing and improving data quality. Users typically accepted what they were given, and any controls put in place to maintain order and oversight of the data were viewed as painful bureaucracy. However, the evolution in analytical technology and the associated uptick in activity has shifted this old paradigm into a new direction.

As more job roles and user types become analytically active, there is a growing imperative to support those activities with better data. Standing in the way though, is a laundry list of challenges. For large and small companies, regardless of job role, the biggest data-related challenge is providing access to the right information for a variety of different users, i.e., overcoming the data silo effect (Figure 1).

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Figure 1: Data Quality and Accessibility Remain Elusive

Difficulty accessing data from different business silos — 46% (Line-of-Business), 40% (Data Professionals)
Poor data quality is informing too many decisions — 33% (Line-of-Business), 32% (Data Professionals)
Insufficient IT resources / expertise to support analytics — 31% (Line-of-Business), 29% (Data Professionals)
Increased urgency for fast information delivery — 28% (Line-of-Business), 37% (Data Professionals)

■ Line-of-Business
■ Data Professionals

% of Respondents   n = 342

Source: Aberdeen Group, August 2017

Demographics:

This report draws on findings from Aberdeen's *2017 Big Data Survey* of 342 organizations. The pool of respondents was diverse, and broke down as follows:

▶ Line-of-Business Manager or Staff – 37%
▶ Executive (VP / C-Level) – 28%
▶ IT Professional – 22%
▶ Business Analyst / Data Scientist – 13%

The data above is segmented into line-of-business users and data professionals (business analysts and data scientists) to make two key points. First, the challenge of fragmented, disparate data is felt by all types of users and doesn't discriminate based on job role. Second, the growth in analytical activity has intensified the urgency for easily-accessible, real-time information for those supporting the data infrastructure and those tasked with extracting value from data. In other words, people need information faster, but the complexity of today's data environments presents a significant hindrance.

An additional and implied challenge in these research findings is the notion of data "findability." Particularly with the expansion of new job roles taking an interest in data, accessibility is certainly an issue. Once a user knows what they need for a particular analysis, many often have trouble simply locating the data in the first place. For this reason, companies are improving their processes and technology infrastructure to improve data "findability."

Leaders in Governance: Unifying People, Process, and Technology

The concept of data governance can be polarizing for many organizations. But companies need to maintain responsible oversight of their information, particularly with the increase in users with a need or desire for better data-driven decisions. Without any controls in place, data quality or data security issues can arise, causing impediments to the flow of information, exposing companies to security threats or possible regulatory sanctions. On the other hand, overly tight and draconian measures to oversee access to information can create a bureaucratic hornets' nest that slows or halts the analytical process in its tracks.

Nevertheless, the research suggests a strong correlation between responsible data governance and tangible business impact. For the purposes of this report, two sets of users were defined based on their self-identified level of maturity with data governance:

▶ **Leaders: Process and technology supported.** Strong data governance policies and procedures in place, supported by a dedicated technology platform.

Top Investment Priorities:

Respondents were presented with a list of traditional and emerging technologies to rate in terms of their investment importance on a scale of 1 (high priority) to 3 (low priority).

The following were the top technologies most likely to be rated as a "high priority".

▶ Data integration & data preparation – 33%

▶ Traditional data infrastructure - database / data warehouse environment – 31%

▶ Traditional BI (i.e., reporting and dashboards) – 31%

▶ Interactive data visualization and discovery – 27%

▶ Master Data Management (MDM) – 24%

(% of all respondents)

▶ **Followers: Weak or loose policies.** Some data oversight policies and procedures in place but poorly defined and communicated, and rarely enforced.

A Wide Variety of Data in Play

In order to understand the impact of a leading approach to data governance, it's important to explore the factors that contribute to this successful strategy. It would be difficult enough to govern and oversee a very straightforward data environment consisting of only traditional structured data from classic enterprise applications. However, Leading companies are dealing with environments that are far more complex. Top performers have the ability to utilize data from a variety of non-traditional sources, partly because of their elevated maturity around technology, but also just out of pure necessity (Figure 2).

Figure 2: The Urgency for Non-Traditional Data
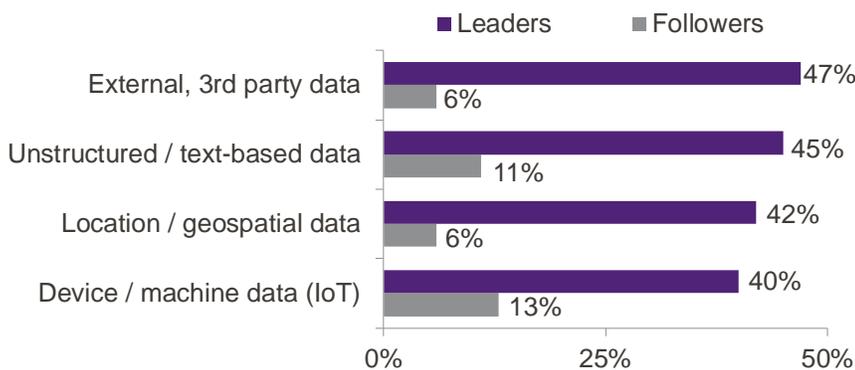
Data types rated as "critical", % of Respondents   n = 342

Source: Aberdeen Group, August 2017

> **Data governance may once have been viewed as unnecessary bureaucracy in the process of managing information, but the research suggests that it helps more than hurts the end user.**

The research shows that the average organization deals with 31 unique data sources used for analysis, but that distribution is starting to move into areas like external third-party sources, unstructured data, and machine-generated IoT sources as well. The most meaningful insights today are generated through the connection and correlation of data from sources across the business. Leaders are dealing with inherently more complex data environments and are making the effort to exploit this wealth of information.

Encouraging Instead of Hindering

Data governance may once have been viewed as unnecessary bureaucracy, but the research suggests that it helps more than hurts end users. Firstly, the concept of data portability is becoming increasingly important, and companies operating under the umbrella of strong data governance have greater confidence in their data and are more likely to socialize key insights across their organization (Figure 3).

Figure 3: Strong Governance Leads to Empowered Users
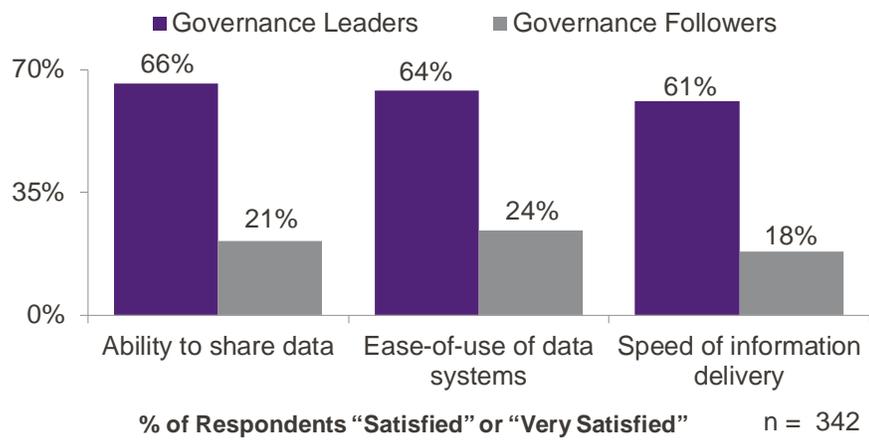
Governance Leaders experience elevated user satisfaction in several other critical areas as well. Cleaner and more trustworthy data contributes to a technology environment that is simply easier to interact with on multiple fronts. With the right policies in place for data access, users are not only prevented from touching data they shouldn't, they're also guided toward the data they need to support their decisions. Those policies and procedures keep people from being led astray and simultaneously facilitate their path to insight. This ultimately leads to higher user satisfaction when it comes to the ease-of-use of their data systems, as well as the timeliness of information delivery.

A Well-Rounded Technology Approach

The next generation of data governance strategy involves unifying the right processes and policies with a supporting backbone of technology, and today's top companies are leading the way with this combined approach (Figure 4).
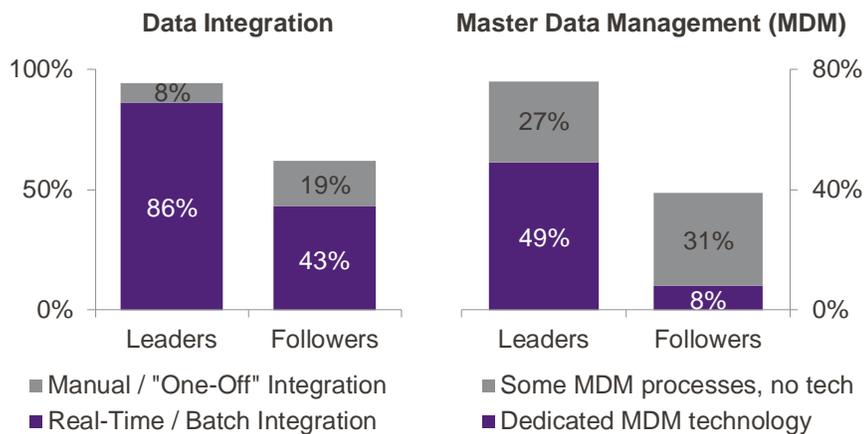
Figure 4: Leaders Deploy a Comprehensive Technology Approach

Data Integration

	Leaders	Followers
Manual / "One-Off" Integration	8%	19%
Real-Time / Batch Integration	86%	43%

Master Data Management (MDM)

	Leaders	Followers
Some MDM processes, no tech	27%	31%
Dedicated MDM technology	49%	8%

■ Manual / "One-Off" Integration   ■ Some MDM processes, no tech
■ Real-Time / Batch Integration   ■ Dedicated MDM technology

n = 342, Source: Aberdeen Group, August 2017

Leaders are more likely to have a formalized approach to data integration that enables the capture and normalization of a variety of different data types to be used in analysis. This capability serves leading companies very well, especially in light of the findings in Figure 2 that highlight the complexity and variety of data that they are beholden to.

A dedicated MDM platform also works in partnership with data governance policies and procedures to help support the connection and correlation of information from multiple data sources, as well as maintain data quality and integrity. Beyond the core disparity in data types discussed above, Leaders are also struggling to manage and connect different overarching data domains (such as customer data or product data), each of which has a unique set of requirements around accessibility and portability. Marrying data integration and MDM technologies with sound data governance policies is a critical differentiator for leading organizations to create what could be called a 360-degree view of the data. As opposed to having mere "pockets" of visibility into the data in one's own job function or domain, Leaders employ a comprehensive technology approach that enables a wider view of more data from more sources and job functions, ultimately supporting better analysis and enriched decisions.

Allocating for Analytical Success:

According to the research, Leaders and Followers are working with similar IT budgets on average – $8.3M for Leaders vs. $10.1M for Followers.

However, the research also shows that Leaders are 2.3-times more likely to allocate more than 10% of that annual budget toward data management and analytics.

The Payoff: Leaders Deliver Results

Aberdeen's research consistently demonstrates how efficiencies in the capture, management, and flow of information within an organization lead to demonstrable results. Ultimately, the alliance between data efficiency and business results is strengthened greatly with a comprehensive, unified approach to data governance. With a clean and consumable foundation of data and an empowered user base, Leaders are able to expedite the flow of information across their organization and deliver critical information on time.

A next-generation governance environment that unifies process, people, and technology helps set the stage for an elevated level of analytical activity. For leading companies, those activities translate to substantial ROI in the form of business growth and cost reduction (Figure 5).

A next-generation governance environment that unifies process, people, and technology helps set the stage for an elevated level of analytical activity.

Figure 5: Data Efficiency and Business Execution
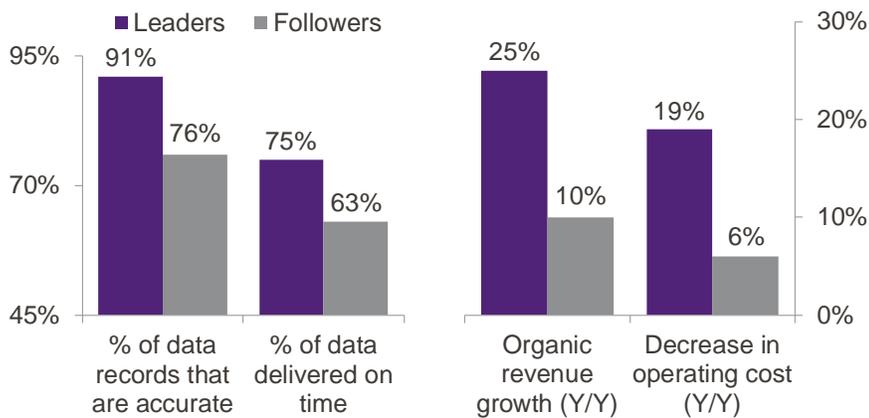
n = 342, Source: Aberdeen Group, August 2017

When interpreting findings like these, sometimes it can be helpful to look at the implications hiding just under the surface. Underperforming organizations (Followers) report that 76% of their data records are accurate, which might seem respectable on the surface. However, when you consider the importance of the analyses and the gravity of the decisions they support, it's startling to realize that one in four data elements used in these analyses are corrupted or otherwise inaccurate. In the face of this level of data urgency, it's difficult to imagine how these companies function when more than a third of key information is delivered too late to impact the outcome of a critical decision.

Leaders on the other hand, while not perfect in either aspect of their data environment, are leveraging their data efficiencies to drive the business

forward. Greater quality and accuracy of information, delivered within the necessary time frame, helps illuminate business opportunities and position the company to drive down cost, improve profitability, and exploit avenues for revenue growth as well.

Key Takeaways

Most established companies have some form of data governance strategy in place, even if it's largely a tacit or implicit set of guidelines. The overarching theme of the research findings, however, is that an elevated level of attention (and possibly investment) in more stable and clearly communicated governance procedures can be highly impactful for companies. For those contemplating their own approach to data governance, the following key takeaways summarize the most prominent findings from the research.

► The Increased need for data is a double-edged sword. On one hand, as a wider variety of users become active with their data, companies are benefiting from an increased analytical appetite and an elevated level of data-driven decision making. On the other hand, this evolving user mindset is necessitating an approach to data management and data stewardship that allows for greater accessibility, while maintaining responsible control and oversight.

► Today's best governance strategies empower, rather than impede. Some companies remain mired in a mindset that data governance policies and technologies do nothing other than slow down the movement and management of data. However, Leading companies today exploit strong and well-communicated data governance policies in conjunction with a well-rounded backbone of technology to empower their users with better data.

► A unified approach to data governance produces results. In the analytical process of transforming raw data into deliverable insight, a top-notch approach to data governance produces more relevant, higher-quality data, delivered in a more timely way. With a flow of data that is faster, more frictionless, and more trustworthy, companies are able to identify and act upon immediate opportunities for business growth and efficiency.

An elevated level of attention (and possibly investment) in more stable and clearly communicated governance procedures can be highly impactful for companies.

Related Research

Modern MDM: The Hub of Enterprise Data Excellence; June 2017

Analytics in the Age of IoT: Today's Data-Driven Competitive Edge; May 2017

The Data Warehouse Evolved: A Foundation for Analytical Excellence; May 2017

Data Preparation: The New Normal, The Now Necessary; March 2017

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