RETHINKING GOVERNANCE IN AN ANALYTICS-DRIVEN WORLD
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OVERVIEW

When travellers are looking for a place to stay, they may no longer use Expedia, but will instead check out Airbnb to find unique rentals by local hosts. Many people now use their smartphones to schedule a ride to the airport with Uber rather than calling a cab. Some people interact with the world on their Apple Watch rather than through an “old-fashioned” mobile device.

The world is changing. Fast. And everyone is scrambling to keep up. The enterprise IT world is experiencing similar disruption. Big Data and analytics are changing the way companies gather, analyze, and use information to make decisions about the business. Analysts are demanding self-service tools to keep up with the rapid changes in today’s business environment.
There’s a new set of rules; and business and IT groups need to be ready to play by them. In this world, where the analytics supply chain is changing rapidly, the impact to IT is substantial. Most significantly, the relationship between IT and the business is evolving, and a new “social contract” is required. This development will substantially influence the way organizations approach IT governance in general and data governance in particular.

To some degree, every business is struggling with a new approach to managing data. Many IT groups have already been exposed to the change through adoption of tools like Tableau, Qlikview, and Spotfire, so they’re open to the concept of self-service analytics. However, there are still many IT organizations led by traditionalists who haven’t yet come to the table. These companies will need to alter their mindset.
if they hope to remain competitive during and after the shift to an agile, analytics-based, decision making environment. The focus is now on faster decision making, transparency, and the need to manage increasing amounts of data coming from multiple, disparate sources.

In this eBook, we’ll examine how the increased focus on analytics, demand for self-service tools, and democratization of data is changing the role of IT and why governance needs to adapt to a data and analytics-driven world.
WHAT IS IT GOVERNANCE?

Governance is usually defined as the responsibility, accountability, communication, and empowerment involving a specific area of the business. Its goal is to ensure the organization’s results are in line with its strategic goals.

TRADITIONAL IT GOVERNANCE:
Traditional IT governance has a structural component that applies to IT activities — the methods in which they support the business and the people who manage those activities. There’s also a process component that defines, measures, and controls the way IT decisions are made and carried out.

In a data and analytics-driven world, the concept of IT governance is expanding beyond policies and procedures. Organizations need to revisit how they enable the business to make decisions and expand governance to incorporate the growing importance of data and analytics. This shift means IT now must develop new rules and metrics that better align with business goals. The focus should be on removing barriers, providing value, and supporting the growing importance of data and analytics.
DATA GOVERNANCE:
Gartner predicts that, by 2017, most business analysts will be using self-service tools to prepare data for analysis. This is causing increased concern over security and privacy issues in many organizations. Without developing a new governance structure to control the growing access to data by the business, Gartner predicts increased resistance to self-service business intelligence.¹

The value of allowing business owners direct access to data — increased speed, accuracy, and collaboration — is too great to let this happen. That’s why now is the time to establish a data governance model that will form the critical foundation in a new, advanced analytics-driven environment in which speed to insight is essential. Key aspects of the plan include:

- Establishing rules for who has access to data, how they will get to it, and how activity will be monitored
- Ensuring data integrity to avoid ruinous results
- Documenting data lineage to enable change review and to better understand analytic results.

ANALYTICS GOVERNANCE:
A second key area of focus involves analytics governance. Organizations have been struggling to establish controls around who has access to the tools and technologies to actually perform analytics. Failure to set up appropriate procedures can have disastrous results. For example, Knight Trading lost $440 million by launching the wrong version of its software when testing algorithms.

¹ Gartner says power shift in business intelligence and analytics will fuel disruption, Gartner Newsroom, January 27, 2015.
CIOs and business leaders need to work together to prevent such devastating consequences. They can do this by defining rules of engagement, establishing security protocols, and documenting best practices for the analytics process.

Analytics governance also involves issues of ethics. Analytics tools today allow businesses to predict behavior to better understand customers. But how far should they go before crossing the privacy line? For example, Facebook caused an uproar in 2012 for conducting an undisclosed psychological study on its users. It exposed 700,000 people to negative and positive news feeds to see if users’ emotions could be manipulated. Facebook COO Sheryl Sandberg apologized, but the incident highlighted the power of data and analytics and the need to control it.\(^2\) Decisions on using data this way need to be part of an analytics governance discussion. And the dialogue needs to come from improved communication and collaboration between the business and IT.

\(^2\) Facebook Mood Manipulation: 10 Bigger Problems, by Thomas Claburn, InformationWeek, July 5, 2012.
The idea of “social contracts” has been around for centuries. The theory is that a population has consented to be ruled by a government in exchange for providing protection and promoting the common welfare. In a commercial context, the business has traditionally been viewed as “the population,” while IT has assumed the role of “the government.” This relationship, however, is changing rapidly and needs to be refreshed to reflect a data and analytics-driven world.

The business now has more influence when it comes to areas traditionally governed by IT. The democratization of data and analytics is bringing the two groups closer, and they need to work together to achieve common business goals.

Forrester says that there must be a shift to “a philosophy and culture of business agility” to close the gap between what customers want and what the business can deliver. Organizations must “build common ground between business stakeholders, developers, and technology professionals” to focus their efforts on satisfying customer needs. This philosophical shift is also crucial for businesses to keep their competitive edge.

Megan Burns, Forrester VP, has spoken about the transformation of IT into BT or Business Technology. She sees this as a logical step as technology and business executives continue to find ways to collaborate. Forrester’s Peter Burris says organizations must combine business technology systems with appropriate processes to effectively service customers. He says the role of CIOs is crucial in making this happen and how they drive the BT initiative will have a significant impact on the success of their businesses.

A NEW “SOCIAL CONTRACT” BETWEEN BUSINESS & IT

In a data and analytics-driven world, traditional governance no longer makes sense. What’s required is a new agile governance framework that can adapt as this new reality evolves. Organizations will need to devise a new set of rules to meet the needs of this new social contract between IT and the business.

Analytics governance has traditionally centered on practice, but it hasn’t been explicitly stated. The emergence of self-service analytics tools and processes has changed this and driven a need for a more formalized approach.

When adopting this new governance structure, businesses must maintain flexibility. As the new rules and relationships evolve, the agile framework becomes crucial, so organizations don’t have to completely retool every time something changes.
The merging of IT and the business faces obstacles. There are serious challenges to a change of this magnitude. Both sides must be ready to alter years of accepted practices and attitudes to establish a new, relevant governance structure.

**INCREASING THE ROLE OF C-LEVEL EXECUTIVES:**
A recent study by MIT Sloan revealed that only 14% of C-level executives were highly satisfied with the performance of the C-suite for shaping digital strategy and making digital decisions. Almost half said they were somewhat or highly dissatisfied. The study identifies this as a governance issue, noting that “as many C-level officers make their digital decisions in silos as make them collaboratively.”

Organizations are recognizing this by creating broad, new C-level positions that focus on data and analytics, but encompass other areas of the business, as well. Roles like Chief Data Officer, Chief Asset Officer, and Chief Knowledge Officer are sprouting up to address this need. Regardless of title, the overriding message is this: the C-suite needs to provide direction and support in a data and analytics-driven world.

**OVERCOMING RESISTANCE:**
Most importantly, the C-Suite must take the lead in breaking down the resistance between the IT and business teams. Any perceived power struggles must be stifled immediately and replaced by an atmosphere of cooperation. Old school turf battles can’t stand in the way of the new reality.

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The message to the troops must be clear. The world has already changed due to wide adoption of disruptive technologies, and the move to a data and analytics-driven world is inevitable. To achieve success, businesses must not only accept this disruption, but must also find ways to thrive in it. Both IT and the business must be convinced that the only viable path to accomplishing this goal resides in a collaborative approach.

MOVING FROM BIG DATA TO DATA AGILITY:
Big Data is no longer the headline. The new reality is having the ability to quickly and confidently prepare and analyze data to positively impact the business. Collecting vast volumes of data is no longer enough. The key is rapidly converting that information into relevant business insights.

There appears to be a long way to go to make that happen. According to Forrester, businesses use only about 12.5% of their available data for business intelligence. John Schroeder, CEO and founder of Hadoop, suggests this is because of the rigid data structure of expensive legacy databases and data warehouses.

Donald Feinberg, VP Distinguished Analyst at Gartner, says we need to rethink the concept of the data warehouse entirely. He says that the traditional data warehouse was "a bridge to near information shores... but now we are in orbit!" He says the way to maximize data agility is to move toward Logical Data Warehouses (LDW) that may no longer be simply a set of physical databases. The LDW combines the use of curated, rough, and new information asset types to develop priorities and timelines.

6 7 Keys for Data Agility, by Cory Vander Jagt, Data Points from Good Data, May 29, 2014.
7 5 Big Data Technology Predictions for 2015, by Thor Olavsrud, CIO eZine, December 22, 2014.
8 Do We Still Need a Data Warehouse, presentation by Donald Feinberg at the Gartner Business Intelligence and Analytics Summit, March 30-April 1, 2015.
Achieving true data agility requires the combined efforts of a team with technical, analytical, and business skills. This group can help refocus the organization away from structured, transactional data toward the semi-structured and unstructured data gushing from mobile devices and the Internet. The businesses that succeed will be the ones that can marry internal systems data with data coming in from external third-party sources and can quickly act on the results.

RETHINKING ENFORCEMENT IN AN AGILE FRAMEWORK:
Converting to an agile government structure doesn’t mean moving to an IT world without restrictions. In many ways, the need for security and enforcement of the new rules of engagement are more important than ever. With more people having access to data and data analytics tools, ensuring data is used within approved parameters is critical.

That said, there does need to be some changes when working in an agile framework. Organizations must move from a traditional, rigid structure to one that is more flexible and can better adapt to inevitable changes. Instead of control/restrict procedures, businesses should embrace a track/trace method by establishing common objectives with both IT and the business. Ultimately there is a need for both control (prevention) and enablement (accountability) to ensure a lighter weight — but still effective — governance alternative.
Change is uncomfortable for most organizations. That’s certainly the case when it comes to the changing relationship between IT and the business. The new social contract between IT and the business means the power of data that once resided solely in the realm of IT now must be shared.

The result is a disruption of traditional governance and a shift from a rigid set of policies and procedures toward an agile structure that can adapt to rapidly changing business needs. IT governance is still crucial, but it must evolve to accommodate a world where data and analytics are the keys to business growth and success. The sooner organizations embrace this new reality, the faster they will be able to reap the rewards.

ABOUT LAVASTORM ANALYTICS
Lavastorm is the agile data management and analytics company trusted by enterprises seeking an analytic advantage. The company’s data discovery platform empowers business professionals and analysts with the fastest, most accurate way to discover and transform insights into business improvements, while providing IT with control over data governance. The company’s solutions have identified business improvements worth billions of dollars for some of the largest corporations in the world. A global company, Lavastorm is headquartered in Boston, MA, with offices throughout EMEA and Asia-Pacific.

For more information, please visit www.lavastorm.com.