

# Data Governance Combined with Analytics for Powerful Business Insights

# **POWERFUL INSIGHTS**

## Issue

Less than a decade ago, large enterprises held significant advantages over small businesses in the same industry, due to their scale, resources and organizational might. This is no longer the case, as drives toward digital innovation and globalization, coupled with the data explosion brought about by increased mobility, technological advancements and social media, have leveled the playing field. Smaller organizations now have the information they need to target customers with better precision and increase sales without the need for scale or significant resources. As such, prior barriers to entry are gone, making it much easier for smaller businesses to compete.

This new trend, often branded as "digital disruption," and the surge in the amounts of data produced along with better strategies for its monetization, have led businesses to further view data as a key asset. This asset, if properly managed, can improve business insight and decision-making in organizations that develop responsive processes to maintain data integrity across their technological landscape.

The key to future success relies on organizations harnessing the data surge while maintaining control over its frenzied pace. Many organizations are establishing enterprisewide data governance functions informed by continuous analytics to help inventory, access and create actionable intelligence from their data. The process involves engaging with the right business users, assessing current processes and business needs, and inventing leaner business processes. Many of these steps are possible only through the enhanced use of technology as an enabler. In the pages that follow, we will address the challenges and benefits of data governance and analytics, and suggest a three-phase process for implementing a data governance strategy to better control, secure and leverage your data to enable business insights.

# **Challenges and Opportunities**

For most organizations, the challenge with capitalizing on the possibilities of data analytics arises not from lack of will but from lack of structure. Many organizations' core business-process systems are at least a decade old, and they do not operate according to established data governance practices with clearly defined roles and responsibilities for data ownership. Traditionally, these organizations' focus was always on implementing a solution for enterprise resource planning (ERP) to bring standardization and automation. rather than reinvent business processes with embedded analytics and governance. Because of this previous lack of focus on governance, master and transactional data often exists in silos, which ultimately affects process efficiency and distorts facts integral to decision-making. In addition, layers of bureaucracy surrounding data, and strategies that are set for years ahead, hamper the ability of large organizations to adapt quickly, break silo walls and direct their spend on developing the data analytics infrastructure needed.

This said, many of the opportunities are within reach for organizations that already have data in their systems, with long-term benefits far exceeding the initial effort and expenditure of a data governance structure. For example, companies can combine data governance with spend analytics to provide a common view of suppliers, relationships and spend across business units, presenting opportunities to negotiate uniform payment terms and improve the cash-conversion cycle. Similarly, a well-organized ontology of maintenance, repair and operations (MRO) items can enhance a company's ability to manage inventory by reducing false stock-outs, excess inventory and multiple sourcing channels with price variations. Creating an on-demand master data program (using technology that automates the creation of master data) can facilitate timely acceptance and delivery of shipments from distribution centers, improving supply chain lead times. In summary, opportunities are many and often unique to every business, and an effective data governance organization combined with analytics can bring significant value in a short span of time.

# A Three-Phase Approach to Establishing Data Governance

Most often, a data governance conversation starts with companies discovering flaws in their data quality, lacking a single version of truth in their enterprise applications, or being unable to easily identify data owners. In many cases, these realizations are made following a sophisticated ERP solution implementation across the organization, which often reveals data flaws previously hidden in isolated locations or processes.

The three-phase data governance methodology outlined below resolves these issues by focusing on establishing a strong master and transactional data governance organization that is responsive and adaptive and, most importantly, properly defines the roles and responsibilities for the data within the organization. The first phase is establishing a governance strategy, which defines policies and procedures of maintaining the data, backed by data profiling to uncover areas of improvement and prioritization for governance road map. The second phase is developing master data governance, with focus on process interactions and validation of key attributes for optimal performance of business operations across the enterprise. The third phase focuses on measuring data quality metrics across master and transactional datasets and suggests corrective actions where needed.

#### Phase 1: Data Governance Strategy and Data Profiling

Data governance refers to all the policies and processes by which an organization manages the definition, quality, consistency, integrity and timely availability of the data behind its business processes. Data profiling is used to understand data quality issues that may be influencing business performance adversely. Based on that, a data governance solution is developed that would address the root cause of each issue.

Data profiling is done by looking at historical data and patterns and talking to business owners to determine how much of the data that is being used is in compliance with the data governance strategy of the organization. The company may need to conduct workshops with the business process owners to uncover broken data processes and pain points. The information uncovered through historical data analysis may be different from the information provided by the day-to-day user – thus, looking at historical transactional data is a key component of data profiling.

Part of the data profiling phase is understanding who owns all major process areas and deciding which lines of business should own the data and be responsible for its ongoing maintenance. To do so, an organization should establish data-centric processes and standardization with a common logical data model throughout its ecosystem. A data-centric process is one informed by the day-to-day practices of the organization rather than a policy that isn't adhered to 100 percent in practice. For example, if an organization aims to pay 60 days net to all vendors and has designed payment terms accordingly but makes many exceptions by routinely paying early, the policy is undermined. The solution is to design a policy in which premiums are offered for a shorter interval between invoice and payment (e.g., a supplier may agree to a 1–2 percent discount for earlier payment).

A current-state assessment of data maturity provides a baseline for measuring progress in data quality over time. Predefined business rules can be applied to specific data sets to quantitatively assess data quality and provide actionable results to improve data governance. Profiling provides enterprises with the ability to develop data quality scorecards for master and transactional data, discussed below.

#### Phase 2: Master Data Governance

Data profiling results provide an acute understanding of master data quality and its overall impact on business process effectiveness. Master data governance enables organizations to use technology to enforce organizational policies and procedures. However, a governance organization is successful only when those policies and procedures actually help a business run efficiently and seamlessly. Investing in master data governance technologies without solid underlying governance policies will not ensure success; however, using the right platform to enforce the policies is critical for improved business process efficiency.

Most data governance technologies provide workflowrelated capabilities to effectively create, maintain and route data based on predefined business rules. The level of automation, the quality of business rules and the use of proper key performance indicators (KPIs) will determine the level of consistency and compliance in master data management.

For example, a 45-day payment-term policy for all material payables can be maintained easily in the master data governance systems with 100 percent compliance. However, tracking compliance is only possible when KPIs are used to provide deviations from payment-term policies.

The goal of master data governance is not only to maintain data policies and procedures but also to provide feedback to data stewards, highlighting outliers in the data that deviate from corporate standards.

#### Phase 3: Data Quality Metrics and Scorecards

Data quality scorecards, which provide meaningful insights about data quality and the impact of the poor quality of dayto-day business operations, are integral to the continuous effectiveness of the data governance organization. Data quality scorecards focus on adherence to master data governing policies and procedures and provide actionable insights to data stewards to improve overall data quality.

The real business value of the data governance organization is evaluating existing business processes and reviewing them from a business perspective for overall process efficiency, combining master data policies with operational

## PROVEN DELIVERY

#### How We Help Companies Succeed

We help organizations identify and seize opportunities for leveraging data to improve business insight and decisionmaking, and we assist with the development of data governance strategies to achieve business goals.

## Contacts

Matt McGivern +1.678.463.8101 matt.mcgivern@protiviti.com

#### of the data structure – a continuous process that identifies when the data structure is diverting from the policy. The scorecard is not limited to the master data but extends to historical and transactional data, combining analytics with governance for useful and actionable insights. While most organizations have in place some form of data governance and utilize data analytics and reports in one form or another, only a few have integrated continuous metrics and data scorecards into their governance processes to help them improve the quality of their business processes. This is one of the key differences between the approach described here and most existing data governance practices.

transaction data. The scorecard is the statistical analysis

Furthermore, we set in place processes and technologies that are repeatable and we help organizations continuously monitor the effectiveness of their data governance policies and procedures and improve the quality of their processes through data analytics integrated in the data governance process.

Sriram Velicheti +1.404.213.6511 sriram.velicheti@protiviti.com

## About Protiviti Inc.

Protiviti (www.protiviti.com) is a global consulting firm that helps companies solve problems in finance, technology, operations, governance, risk and internal audit, and has served more than 60 percent of *Fortune* 1000<sup>®</sup> and 35 percent of *Fortune* Global 500<sup>®</sup> companies. Protiviti and our independently owned Member Firms serve clients through a network of more than 70 locations in over 20 countries. We also work with smaller, growing companies, including those looking to go public, as well as with government agencies.

Ranked 57 on the 2016 *Fortune* 100 Best Companies to Work For<sup>®</sup> list, Protiviti is a wholly owned subsidiary of Robert Half (NYSE: RHI). Founded in 1948, Robert Half is a member of the S&P 500 index.



© 2016 Protiviti Inc. An Equal Opportunity Employer M/F/Disability/Veterans. PRO-0816-107138 Protiviti is not licensed or registered as a public accounting firm and does not issue opinions on financial statements or offer attestation services.