



TRIANZSM
Execution Matters.



InformaticaTM

Annual Growth

Business Index



Top 3 Strategies for Modernizing Enterprise Data Management



CLOUD • ANALYTICS • DIGITAL • SECURITY

Maximizing Business Insights and Business Value Through Agile Information Management

Data: Business Liability or Business Asset?

As your business strives for greater agility and innovation, is data a problematic barrier or a transformational asset to deliver better customer experiences and improve enterprise performance and profitability?

Data is a barrier when it's scattered across applications without agile, uniform information management. The business impacts are many. Contradictory information can lead to delays and guesswork decisions. Poor data management compromises business advantage and imposes high IT costs for one-off connectivity projects.

Data is an asset to drive these transformations when it's synchronized and readily consumable by business users. Accurate and timely data makes possible informed decision-making. Integrated data becomes the catalyst for customer centricity and heightens operational efficiency and visibility into critical business metrics.

In our hyperspeed digital economy, transforming raw data into trusted business insights is the key differentiator for delivering personalized customer service, leveraging mobile and social channels and creating disruptive new business models. Capitalizing on data's potential for business impact is arguably the greatest challenge facing enterprises today.

Rethinking Enterprise Data Management Strategies

Business and IT leaders recognize the importance of data. For instance, according to a study by The Economist Intelligence Unit, 97 percent of C-level executives characterize data as strategic to the business.¹

Yet only 15 percent of C-level executives believe they are as good or better than competitors at using data. A separate study by PwC found that 61 percent of organizations are only "somewhat" or "rarely" data-driven in basic descriptive analytics.²

Enterprise data management is not a new challenge. But now, pressures on IT to lead business

transformation is prompting organizations to re-evaluate data strategies. So is rapid growth in data volume and complexity, with up to 50 percent of data coming from external sources. Some factors include:

- **Cloud Applications.** Across lines of business and discrete functions, rapid proliferation of cloud applications is introducing new complexity and driving an urgent need for data integration. Hybrid IT environments of both cloud and legacy on-premise systems are now the norm, introducing complications on how data is used across those heterogeneous systems.
- **Big Data and IoT.** The volume, variety and velocity of internal and external data continue to grow with new unstructured and semi-structured sources that can be leveraged for insights and efficiencies. The Internet of Things (IoT) is unleashing sensor-based data from manufacturing equipment, mobile phones, logistics systems and more that's rich in business value.
- **Self-service and Advanced Analytics.** Organizations look to strengthen analytics with better self-service for business users and more reliable, real-time data. Others are augmenting traditional query and reporting with predictive analytics that uses such technologies as data mining, statistical and text analysis, and machine learning to forecast trends and identify risk and opportunities.

Some organizations are not well equipped to address these dynamics. Often based on systems deployed a decade or more ago, data management continues to suffer from high costs, inflexibility, delays and subpar results. Reliance on custom coding exacerbates the problem by inhibiting reusability and draining valuable IT resources, while the organization struggles with data fragmentation across silos.

¹The Economist Intelligence Unit, The Data Directive.

Modernizing the Data Ecosystem

Leading organizations are engineering new connectivity and scale into the data management infrastructure to capture tangible business value. Winning approaches are distinguished by collaboration between business and IT to devise and iterate a strategic roadmap for utilizing data. A best practice is to focus on high-impact projects with rapid time to value, rather than trying to “boil the ocean.”

It’s important to recognize that data can no longer be defined by its source or application, but must be managed as an interconnected ecosystem spanning all applications, processes, platforms, devices and users. Evolving to that next-generation environment requires embracing modern and often cloud-based technologies.

The past decade has seen the introduction of a broad range of technologies geared for next-generation data management – from Hadoop-based data lakes and fast in-memory processing to cloud-based tools for data integration and Master Data Management (MDM). Effectively utilizing modern technologies equips organizations to focus on three strategic priority areas:

- Modernize data management
- Extend self-service, predictive analytics and visualization
- Streamline data exchange in hybrid IT environments

1) Modernize Data Management

With a rapidly changing and ever-more complex data ecosystem, data management is more essential than ever for quickly and repeatedly delivering business value from data. Data quality and consistency is critical for organizations to become truly data-driven.

Organizations can’t afford to invest more human resources in handling growing complexity and fragmentation in data ecosystems. IT leaders and data architects need to standardize on a comprehensive and automated approach to data management that is distinguished by speed, reusability, efficiency and ultimately results.

Agile Data Integration Layer. Intelligent data integration provides universal access to your information assets, minimizing problems with ad hoc approaches and delivering enterprise scalability in transformation and exchange. The best solutions

deliver new flexibility across applications, enterprise warehouses and data marts, warehouse appliances, and Hadoop or NoSQL repositories of structured and unstructured data.

Data Quality and Consistency. Data quality is too often treated at a tactical level, leaving gaps and contradictions across applications. A pervasive approach to data quality with strong data governance helps ensure timely, trusted data, regardless of where it resides. Complementing data quality with MDM generates a single source of truth with a 360-degree view across all hierarchies and interactions.

Data-centric Security. Addressing security at the application and data center level still leaves an organization exposed to data loss or cyber-attack from employees and mobile devices outside the firewall. A data-centric approach augments traditional protections by mapping tags, classifications and policies directly into the data, strengthening security both within and beyond the network perimeter.

Data Lake Management. The Hadoop framework and NoSQL databases offer options to combine structured and unstructured information from big data and IoT sources into “data lakes” for data exploration. Hadoop can also reduce time and cost by transforming raw data into understandable formats, offloading that task from a traditional warehouse.

Data scientists and analysts can explore this data, either to test a hypothesis or to identify previously unrecognized connections. However, without data lake management tools, most data remains unusable. Data lake management ensures that data can be quickly ingested, prepared, governed and secured inside data lakes.

2) Extend Self-service, Predictive Analytics and Visualization

A solid data foundation multiplies the payback from analytics, both for business users and data scientists. Increasing the analytics footprint across the enterprise is a top priority for organizations to become more data-driven by generating and acting on insights to improve business performance. Self-service data exploration. Leading self-service Business Intelligence (BI) tools equip non-technical

business users with the right data at the right time for insights into financials, sales, customer relationships, marketing and other areas. Giving the business hands-on control of data preparation, modeling and reporting eliminates lag times and miscommunication, typically when IT is tasked to run reports on behalf of the business.

Predictive Analytics. Though not a new discipline, predictive analytics has matured in recent years with sophisticated tools to forecast trends and business outcomes. Prescriptive analytics goes a step further to recommend the best course of action for a desired outcome. These tools are increasingly important for generating insights from complex data sets to detect fraud, reduce risk, and optimize pricing and operations.

Data Visualization. Business users and data scientists can more readily identify patterns, trends and relationships with data visualization tools that graphically represent information. Today's top data visualization tools leverage advanced analytics to render complex information in charts, graphs and maps. That speeds time to insight and helps unearth connections that would be impossible to detect in a standard report.

Data Science. The growing discipline of data science builds on statistics, predictive analytics and machine learning to extract insights from complex information. Cultivating a data science culture, capabilities and talent pool can help enterprises to better monetize their data assets and generate insights to positively impact their business. Data scientists can become trusted advisors and advocate for functional and line of business leadership.

As it is, however, data scientists can spend up to 80 percent of their time wrangling with data before doing any meaningful analysis.² Modernizing the data ecosystem is a prerequisite for maximizing value from data science and other analytic disciplines.

3) Streamline Data Exchange in Hybrid IT Environments

Cloud applications have proliferated across lines of business and in functional areas such as sales force automation, marketing, HR and customer service. Known as "shadow IT," many of these cloud solutions have been deployed independently by business units seeking greater time to value and

flexibility by bypassing IT involvement.

Shadow IT poses a significant challenge. A Cisco study found an average of 1,220 shadow IT cloud apps in place at large organizations, surging 112 percent in 2015.³ While they offer tactical benefits to business units, standalone cloud applications should interoperate with legacy on-premise systems in a hybrid IT environment.

Manage the Data within the "Frankencloud." Cloud app proliferation introduces the risk of a "Frankencloud" of unintegrated cloud silos. An intelligent enterprise cloud data management layer helps IT gain control by imposing data standards and governance across the cloud app landscape for sound data management, security and operational effectiveness.

Connect Legacy and Cloud Systems. Organizations need to exchange data between cloud and on-premise applications, for instance, data from Salesforce into an Oracle or SAP ERP system, as well as channel information from both systems into a data warehouse. Flexible and reusable integration mechanisms are required to avoid the IT overhead of traditional approaches to data management.

Utilize iPaaS in Hybrid IT. Cloud-based integration platform as a service (iPaaS) technology has rapidly grown as a viable option for data and application integration. An iPaaS solution can be less costly and more flexible while delivering faster payback. iPaaS is increasingly used to augment traditional Extract, Transform and Load (ETL) and Enterprise Service Bus (ESB) systems in hybrid IT environments.

²The New York Times, "For Big Data Scientists, 'Janitor Work' Is Key Hurdle to Insights," August 17, 2014.

³Cisco Systems, "Shadow IT Rampant, Pervasive and Explosive!," January 19, 2016.

Driving Real-world Business Impact

Modernizing the data management ecosystem is helping organizations increase business value in such areas as customer relationships and service, sales and marketing, finance, product management, fraud detection, and supply chain and logistics. Across industries, organizations see benefits such as: **Improved Operational Efficiency** with seamless access to secure and well-governed enterprise data, regardless of its location.

Smarter, Faster Business Decisions with self-service analytics and access to real-time data for business users.

More Profitable Customer Relationships through data-centric sales, marketing and service oriented around a 360-degree customer view.

Greater Agility and Innovation by eliminating data barriers and improving forecasting on challenges and opportunities.

Enhanced Collaboration across interdepartmental IT and business teams, as well as with external customer and supplier stakeholders.

Future-proof Flexibility to adapt to continued business and IT changes with reusable processes and consistent, reliable and timely enterprise data.

Large Insurance Firm Turns Data into Insights

A large insurance company based in the U.S. has improved insights and agility with data management and analytics modernization in key areas of the business. Working with the management consulting and systems integration firm Trianz and data integration leader Informatica, the firm has scaled its data warehouse and BI capabilities to strengthen lines of business.

The company has standardized data exchange across source and target systems and improved data with solutions for data quality, governance and MDM. Business users can more effectively leverage data with self-service reporting atop a scalable platform that ties together BI, data warehouses and databases, and both legacy and cloud applications.

Get on a Fast Track to Business Value



Informatica

Trusted strategic partners with deep expertise in enterprise data management and analytics help companies transform data into business value. Trianz and Informatica offer a total solution to guide organizations to the right roadmap and technology decisions and accelerate payback from data-centric modernization.

With more than 2,000 client engagements over 15 years, Trianz helps organizations leverage new Data Management, Cloud, Analytics, Security and Digital paradigms to transform business ecosystems. Headquartered in Silicon Valley with 10 offices around the world, Trianz serves a wide range of clients from *Fortune* 1000 to emerging companies in high tech, insurance, financial services, retail, manufacturing, life sciences, public sector and logistics industries.

As an Informatica partner, Trianz helps guide enterprises with strategic, implementation and optimization services with Informatica's market-leading data management platform and leading best-of-breed solutions for Analytics, Cloud, Big Data and more.

About Informatica



Informatica is 100 percent focused on data because the world runs on data. Organizations need business solutions around data for the cloud, big data, real-time and streaming. Informatica is the world's No. 1 provider of data management solutions, in the cloud, on-premise or in a hybrid environment. More than 7,000 organizations around the world turn to Informatica for data solutions that power their businesses. For more information, visit www.informatica.com.

© 2017 Informatica LLC. All rights reserved. Informatica® is a registered trademark of Informatica in the United States and in jurisdictions throughout the world.

About Trianz



Trianz enables digital transformations through effective strategies and excellence in execution. Collaborating with business and technology leaders, we help formulate and execute operational strategies to achieve intended business outcomes by bringing the best of consulting, technology experiences and execution models. Powered by knowledge, research, and perspectives, we serve *Fortune* 1000 and emerging organizations across industries and geographies to transform their business ecosystems and achieve superior performance by leveraging Cloud, Digital, Analytics and Security paradigms. As a professional services firm, our values and culture are focused on delivering measurable business impact, predictability in execution, and a unique partnership experience.

Silicon Valley | New York | Washington DC Metro

www.trianz.com | sales@trianz.com | +1-408-387-5800

@ Copyright 2017, Trianz. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the express written permission from Trianz. The information contained herein is subject to change without notice. All other trademarks mentioned herein are the property of their respective owners.