

EMC BIG DATA ADVISORY SERVICE

Find the right big data business opportunity and build a comprehensive roadmap to capitalize on it

ESSENTIALS

Exploit the business value of big data

- Pick the best-fit, priority business opportunity
- Build use cases that drive next-generation business intelligence and analytics
- Create a conceptual architecture for a more agile data platform
- Assess readiness of data quality, governance, and security
- Develop a vision for applying cloud capabilities
- Integrate findings into a phased roadmap

BUSINESS CHALLENGE

Companies are trying to uncover compelling insights about their businesses in order to gain a competitive advantage. They are exploring insightful questions such as:

- Who are my most **valuable** customers?
- What are my most **important** products?
- What are my most **successful** campaigns?

Historically, IT and business users have only been able to work with a small subset of the available corporate information to try and answer those key questions. Because of this, industry research has documented the fact that business leaders:

- Often make critical decisions without the information they need
- Have made important business decisions based on “gut feel” and experience rather than on sound and verifiable information
- Are aware of bad decisions that managers have made within their organizations because they did not have access to accurate information
- Don’t have access to the information across their organizations that is needed to do their jobs
- Say more predictive information would drive better decisions

New, vast, and complex types of data, termed “big data,” are now available and readily accessible and can provide innovative insights on customers, products, and operations. These new data sources (web activity, mobile or location data, and social feeds) combined with traditional data sources provide the opportunity to enable levels of business insight that are currently unachievable. Tapping into these new sources will enable business users to outperform their industry peers by moving beyond just financial measurements of success to consider the entirety of the contributions that customers, products, and campaigns make to the business.

SERVICE DESCRIPTION

To develop a big data strategy to capitalize on these new business insights means you must address more than just data volume. In addition, a successful big data strategy must consider the velocity, variety, and complexity of information available:

- **Volume:** data volumes approaching multiple petabytes
- **Velocity:** data being generated and ingested for analysis in real time
- **Variety:** tabular, documents, email, metering, network, video, image, and audio
- **Complexity:** different standards, domain rules, and storage formats per data type

The EMC® Big Data Advisory Service helps you identify the right big data business opportunity and build a comprehensive roadmap to capitalize on it. EMC Consulting's proven step-wise approach will ensure that big data management and architectures address the issues that emerge from the wide variety of data formats, the velocity at which data arrives, and the complexity of the information asset. Many existing tools, platforms, and approaches may need to be upgraded to exploit the business potential of big data.

STEP 1: PICK THE BEST-FIT, PRIORITY BUSINESS OPPORTUNITY

The first step in the EMC Big Data Advisory Service is to identify where and how big data and analytics can power your organization. We use our proven Analytics Valuation Methodology to identify strategic business initiatives that:

- Are cross-functional
- Provide compelling business value
- Have measurable goals
- Have a well-defined delivery timeframe

STEP 2: BUILD USE CASES THAT DRIVE NEXT-GENERATION BUSINESS INTELLIGENCE AND ANALYTICS

A comprehensive user experience that covers reporting, dashboards, ad-hoc query, and analysis is needed to support the more timely decision making enabled by big data. EMC Consulting leverages a use case approach to identify the ramifications to your business intelligence (BI) and analytics systems from new big data sources. We will:

- Assess your current BI and analytics environment
- Document the impact from big data on your BI and analytics environments
- Map your current capabilities to the EMC Big Data Maturity Curve

STEP 3: CREATE A CONCEPTUAL ARCHITECTURE FOR A MORE AGILE DATA PLATFORM

Traditional OLTP-centric relational database management systems were never designed with big data in mind. Traditional data pipelines cannot meet the needs of big data analytics. Rapidly growing volumes of data strain the traditional data pipeline to the breaking point, forcing organizations to work with summaries and samples of data. The result is that cycle time from data to analysis is measured in weeks rather than hours and as a result the quality of the analytics suffers. New massively parallel processing (MPP)-based data warehouses provide a scalable and agile data warehouse platform capable of exploiting the business value of structured and unstructured big data. EMC Consulting will help you develop a plan to support fast ingestion of new structured and unstructured big data sources. We'll help you create an agile, extensible platform that can accommodate change. We will:

- Assess your current data warehouse environment and document the impact on it from big data
- Assess your current ETL environment and document the impact on it from big data
- Create an agile data warehouse architecture that:
 - Is extensible and able to rapidly ingest new data sources
 - Has flexible data models for exploration of dynamic insights
 - Augments ETL with ELT to enhance data enrichment capabilities

STEP 4: ASSESS READINESS OF DATA QUALITY, GOVERNANCE, AND SECURITY

Your data must provide a trusted view of your business. Organizations need a “business plan” that treats data like an asset, not as an expense. This data business plan must cover data quality, governance, and security, and cultivate both internal data as well as third-party data sources. A thorough, well-architected plan will constantly monitor, enhance, and ensure the security, accuracy, and completeness of your organization’s strategic data stores on an on-going (operational) basis and address data procedures, policies, and organizational discipline. EMC Consulting will:

- Ascertain your level of data quality, governance, and security maturity
- Document big data impact on data quality and data governance processes

STEP 5: DEVELOP A VISION FOR APPLYING CLOUD CAPABILITIES

A cloud architecture can impact your enterprise information management capabilities. It offers opportunities for self-service BI and analytics to support short-window business opportunities. It can provide integrated collaboration for analytics around a specific subject area or business opportunity. When used correctly, it can accelerate “data monetization” efforts. To help you leverage cloud architectures to transform your data management capabilities, EMC Consulting will:

- Review cloud capabilities and enablers against your big data challenges
- Map your current capabilities to the EMC Cloud Maturity Curve
- Identify specific architectural and operational areas where the cloud can have material impact and document cloud recommendations with respect to:
 - Data warehouse architecture and operations
 - Reporting, business intelligence, and user experience
 - Advanced analytics deployment
 - Data quality management

STEP 6: INTEGRATE FINDINGS INTO A PHASED ROADMAP

EMC Consulting will build you a comprehensive transformational roadmap focused on powering your prioritized key business initiative. The roadmap is tailored to your unique organizational and technical requirements and capabilities, and addresses the previous five critical Enterprise Information Management dimensions for effective delivery of big data services. We’ll provide an executive-level presentation that contains a detailed assessment of your current capabilities with recommendations for addressing the findings from each step in the Big Data Advisory Service.

SUMMARY OF BENEFITS

Organizations that integrate high value, diverse, new big data sources into a coherent information management infrastructure will:

- Benefit from more agile, more realtime, more accurate decision making
- Be able to predict and spot changes in dynamic and volatile markets
- Have a deeper understanding of customer preferences and behavior
- Experience greater fidelity in risk assessment and compliance enforcement

EMC Consulting’s Big Data Advisory Service can help you create the business and IT architectures that have the potential for substantive new revenue and competitive advantage.

EMC CONSULTING

As part of EMC Corporation, the world's leading developer and provider of information infrastructure technology and solutions, EMC Consulting provides strategic guidance and technology expertise to help organizations exploit information to its maximum potential. With worldwide expertise across organizations' businesses, applications, and infrastructures, as well as deep industry understanding, EMC Consulting guides and delivers revolutionary thinking to help clients realize their ambitions in an information economy. EMC Consulting drives execution for its clients, including more than half of the Global Fortune 500 companies, to transform information into actionable strategies and tangible business results.

CONTACT US

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