

Data Management for Reporting, Analytics and Machine Learning



PARTICIPANT QUALIFICATIONS

This course is designed for Executives and Senior Managers. The assertion is that “it is difficult to manage something that you don’t understand.” The ideal participant is the Executive who must deliver on an investment in Data Science, Data Management, or Big Data Analytics.

COURSE DURATION

This course is designed for either a half day or full day instruction.

COURSE DESIGN

This offering is offered from a standard syllabus, or it can be adapted to unique organizational requirements.

DATA MANAGEMENT FOR REPORTING, ANALYTICS and MACHINE LEARNING

Data Scientists crave data. They are willing to accept inaccuracy in the form of a probabilistic error distribution that can be analyzed using parametric and non-parametric statistical methods. Executives crave accurate data. They are constantly trading-off the cost of making bad decisions that are influenced by inaccurate data. This apparent schism has led some researchers to assert that “Data Quality is in the Eye of the Beholder.” The problem has evolved into an interesting interaction between IT and Management, with advocates for different approaches to the handling of data in organizations. For the purposes of this training offering, the different approaches are labeled:

- Data Management
- The Management of Big Data

Some of the differences derive from definitional abuses, but the argument here is that the two approaches are compatible, but different.

Before diving into advanced analytics, it’s important to create a solid foundation for governing and managing data.

The two approaches could converge over time, but for now they are different, and they have vocal advocates. It is imperative that managers understand these differences before investing in new Data Science platforms.

The training course explains the differences in terms of the objectives of the advocates, and with a focus on Data Governance, Data Quality, Metadata Management, and other core Data Management functions. Architectures are presented that accommodate both approaches. The analysis of approaches focuses on the managerial and technological implications, and as a necessity eventually focuses on Data Management Platforms and Data Science/Machine Learning Platforms.

An old IT adage states that “If you have enough money and enough time, anything is possible.” Money and time are important, so efficiency is a critical issue. We conclude the training by arguing that an integrated data and analytics platform is the most efficient and practical approach combining Data Management with the Management of Big Data.