Getting Value from Big Data (Hadoop for Managers and Execs)

Course Summary

Description

This course covers the topics of the brave new world of Big Data, benefits, business opportunities, challenges, technologies, and implementation stages. Labs are optional but highly recommended. They are kept on the level that is high enough for managers and executives, but nevertheless provide a good feel for the technologies.

Objectives

After taking this course, students will be able to:

- Review Big Data challenges, potential, and benefits
- Understand Apache Hadoop, its role in Big Data and the roles of related technologies
- Survey typical use cases in various industries
- Get firm grip on phases of Big Data technologies adoption in the enterprise
- Get a preview of the future of Hadoop and Big Data

Topics

- Big Data potential and benefits
- Hadoop and Big Data technologies
- Typical use cases in various industries/sectors (this section may be tailored).
- Hadoop and Big Data adoption
- The Future of Big Data and Hadoop

Audience

This course is designed for executives, IT managers, and investors who want to learn about Hadoop and Big Data.

Prerequisites

There are no prerequisites for this course.

Duration

Two days
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Course Outline

I. Big Data potential and benefits
   A. What is Big Data?
   B. Sources
   C. Quantities
   D. Challenges of processing
   E. Technologies
   F. Strategies
   G. New ways of data thinking
   H. Uses and benefits
   I. Big Data players, their approaches
   J. Untapped potential

II. Hadoop and Big Data technologies
   A. History of Hadoop tools
   B. Architectural Concepts
   C. Who is using Hadoop
   D. Hadoop skills and job market
   E. Distributions and support
   F. 8 use cases of how Hadoop can help you

III. Typical use cases in various industries/sectors (this section may be tailored).
    A. Social networking
    B. Marketing and advertising
    C. Financial risk / insurance
    D. Healthcare
    E. Law enforcement
    F. Sales and market analytics
    G. Fraud detection
    H. Litigation
    I. Government and politics
    J. Language, meaning, feeling
    K. Human resources

IV. Hadoop and Big Data adoption
    A. Hadoop benefits: storage & processing
    B. Hadoop ecosystem
    C. Integration with Hadoop (BI tools, databases, visualization, etc.)
    D. What is possible with Hadoop: batch analysis, real time analysis, analytics
    E. Competing and complementing technologies (Oracle, IBM, Microsoft, etc.)
    F. Planning adoption: use cases, pilot projects, implementations
    G. Key challenges of adopting Hadoop / Big Data
    H. Production and beyond
    I. The role of iterative design and development

V. The Future of Big Data and Hadoop
    A. Adoption trends
    B. Hadoop developments and alternatives
    C. What's next for Big Data in general

VI. Labs and demos (optional but recommended)
    A. High-level Hadoop labs
    B. Hive SQL labs
    C. Spark labs as demo