

# Big Data Road Map

Eğitim Tipi: **Classroom**

Süre: **1 Day**

## **Eğitim Hakkında**

Big data has become the new normal. Every enterprise wants to know how to integrate this new type of data and the associated infrastructure changes that need to be implemented. The world of big data infrastructure changes by the day, with new innovations happening everywhere. There are a slew of new technologies—Hadoop, NoSQL, BigQuery, Tableau, Qliktech, R, and Drill.

There are new papers on emerging technologies, such as Spanner and Dremmel. The big question is: Which of these technologies does your organization need? How do we evaluate and integrate them? How will this impact your EDW strategy? This session will focus on these topics and more.

## **What You'll Learn**

- Big data: What is it? What will it solve?
- Business users and big data
- Building the business case
- Next generation of business intelligence
- Semantics, ontologies, and more
- Managing the business rules for processing
- Case studies
- Big data and the data warehouse: the new landscape
- Technology overview
- Hadoop, NoSQL, Cassandra, Big Query, Drill, Redshift, AWS (S3, EC2)
- Programming with MapReduce
- Understanding analytical requirements
- Self-service discovery platforms
- The challenges of data processing
- Workloads
- Data management
- Infrastructure limitations
- Next-generation data warehouse
- Solution architectures
- The three S's: scalability, sustainability, and stability
- People skills
- Critical success factors

## **Who Should Attend**

Enterprise architects and data warehouse architects; developers; anyone who wants to learn about big data technologies.

## **Önkoşullar**

There are no prerequisites for this course.

## **Neler Öğreneceksiniz**

- Big data: Nedir, Neleri çözecek
- İşletme kullanıcıları ve bigdata
- Business case/ Olur durumu/olurluk incelemesi inşa etme
- İş istihbaratının yeni jenerasyonu
- Anlambilim, varlıkbilim ve dahası
- İşleme için iş kurallarını yönetme
- Örnek olay çalışmaları
- Big data ve veri ambarı
- Teknoloji değerlendirmesi
- Hadoop, NoSQL, Cassandra, Big Query, Drill, Redshift, AWS (S3, EC2)
- MapReduce ile programlama

- Analitik gereklilikleri anlama
- Self-servis keşif platformları
- Veri işlem zorlukları
- İşyükleri
- Veri yönetimi
- Altyapı sınırlamaları
- Yeni nesil veri ambarı
- Çözüm mimarileri
- Ölçeklenebilirlik, sürdürülebilirlik ve stabilite
- İnsani beceriler
- Kritik başarı faktörleri

## **Eğitim İçeriği**

### **Module 1: Big Data and Business Case**

- What is Big Data? – Creating a definition
- What will it solve? – Potential solutions for an organization (this will be specific for onsite courses)
- Business Users and Big Data
  - Understanding Roles and Skills – What does the business user bring to the table? Why should IT look to getting the business users own and drive the initiative?
  - Business User Ownership – What does this entail?
  - Challenges – Issues and Risks
- Building the Business Case
  - Components of Big Data Business Case
  - How to build the Appropriate Business Case
- Next Generation of Business Intelligence
  - Analytics and Metrics – What do we derive new?
  - Visualization Requirements – What are the changes and associated challenges?
  - Mashups – Understanding multi-dimensional data management. Metadata is critical and why?

### **Module 2: Semantics and Ontologies**

- Introduction to Semantic Frameworks – Future of Visualization and Analytics
- Understanding Semantic integration for Big Data – Where and How? Business Benefits.
- Using Ontologies for Metadata Management – Case Study
- Managing Business Rules for Processing - Case Study

### **Module 3: Big Data and the Data Warehouse**

- The New Landscape
- What Can We Solve
- How to Assess and Manage Data For Today and Future
- Technology overview
  - Hadoop, NoSQL, Cassandra, Big Query, Drill, Redshift, AWS (S3, EC2)
  - Programming with MapReduce
  - Understanding analytical requirements

### **Module 4: Self-Service Discovery Platforms**

- Challenges of Data Management and Processing
- MDM, Metadata and More – Have we moved over this?

### **Module 5: Workloads**

- Data Management
- Infrastructure Limitations

### **Module 6: Next-generation data warehouse**

- Solution architectures
  - The three s's: scalability, sustainability, and stability
- People skills
- Critical success factors

### **Module 7: Big Data Road map**

- Building A Road map
- Risks and Mitigations
- Business Driven Objectives
- Solving A Million Dollar Puzzle
- Readyng The Organization