Introduction to the BI Roadmap

- Waterfall methodologies
- Spiral business intelligence/data warehousing methodologies
- Engineering stages
- Development steps
- Parallel development tracks
- Business intelligence/data warehouse project team structure
- Software release concept
- Project dynamics

Step 1: Business Case Assessment

- Things to consider
- Business justification (ROI)
- Cost-benefit analysis
- Risk assessment
- Business case assessment activities
- Deliverable resulting from these activities
- Roles involved in these activities

Step 2: Enterprise Infrastructure Evaluation

- Technical Infrastructure Evaluation
  - Things to consider
  - The hardware platform
  - The middleware platform
  - The DBMS platform
  - Technical infrastructure evaluation activities
  - Deliverables resulting from these activities
  - Roles involved in these activities

- Non-Technical Infrastructure Evaluation
  - Things to consider
  - Enterprise architecture
  - Enterprise standards
  - Non-technical infrastructure evaluation activities
  - Deliverable resulting from these activities
  - Roles involved in these activities

Step 3: Project Planning

- Things to consider
- Defining the business intelligence/data warehouse project
- Planning the business intelligence/data warehouse project
- Project planning activities
- Deliverables resulting from these activities
- Roles involved in these activities

Step 4: Project Requirements Definition

- Things to consider
- General business requirements
- Project-specific requirements
- Project requirements definition activities
- Deliverable resulting from these activities
- Roles involved in these activities

Step 5: Data Analysis
• Things to consider
• Business-focused data analysis
• Top-down logical data modeling
• Bottom-up source data analysis
• Data cleansing
• Data analysis activities
• Deliverables resulting from these activities
• Roles involved in these activities

Step 6: Application Prototyping
• Things to consider
• Purposes of prototyping
• Best practices for prototyping
• Types of prototypes
• Application prototyping activities
• Deliverables resulting from these activities
• Roles involved in these activities

Step 7: Metadata Repository Analysis
• Things to consider
• Metadata classifications
• Metadata repository challenges
• The logical meta model
• Metadata repository analysis activities
• Deliverables resulting from these activities
• Roles involved in these activities

Step 8: Database Design
• Things to consider
• Database design philosophies
• Logical database design
• Physical database design
• Database design activities
• Deliverables resulting from these activities
• Roles involved in these activities

Step 9: Extract/Transform/Load Design
• Things to consider
• Preparing for the ETL process
• Designing the extract programs
• Designing the transformation programs
• Designing the load programs
• Designing the ETL process flow
• ETL design activities
• Deliverables resulting from these activities
• Roles involved in these activities

Step 10: Metadata Repository Design
• Things to consider
• Metadata repository solutions
• Designing a metadata repository
• Licensing (buying) a metadata repository
• Metadata repository design activities
• Deliverables resulting from these activities
• Roles involved in these activities
Step 11: Extract/Transform/Load Development
- Things to consider
- Source data transformation
- Reconciliation
- Peer reviews
- ETL testing
- ETL development activities
- Deliverables resulting from these activities
- Roles involved in these activities

Step 12: Application Development
- Things to consider
- Online analytical processing tools
- Multidimensional analysis factors
- Online analytical processing architecture
- Development environments
- Application development activities
- Deliverables resulting from these activities
- Roles involved in these activities

Step 13: Data Mining
- Things to consider
- Defining data mining
- Data mining techniques
- Data mining operations
- Applications of data mining
- Data mining activities
- Deliverables resulting from these activities
- Roles involved in these activities

Step 14: Metadata Repository Development
- Things to consider
- Populating the metadata repository
- Metadata repository interface processes
- Metadata repository testing
- Preparing for the metadata repository rollout
- Metadata repository development activities
- Deliverables resulting from these activities
- Roles involved in these activities

Step 15: Implementation
- Things to consider
- Security management
- Data backup and recovery
- Monitoring the utilization of resources
- Growth management
- Implementation activities
- Deliverables resulting from these activities
- Roles involved in these activities

Step 16: Release Evaluation
- Things to consider
- The application release concept
- Post-implementation reviews
• Release evaluation activities
• Deliverables resulting from these activities
• Roles involved in these activities