Business Intelligence Roadmap:

The Complete Project Lifecycle for Decision-Support Applications

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