Module One
Introduction to Systems Thinking and BI
- Business Intelligence
  - Common Definitions
  - A Look inside the Words
  - BI Redefined
- Business Analytics
  - Analytics Defined
  - Developing Analytics
  - Using Analytics
- Systems
  - System Defined
  - Computer Systems
  - Information Systems
  - Business Systems
  - Analytic Systems
- Systems Thinking
  - Systems Thinking Defined

Module Two
Systems Thinking Concepts
- Systems Thinking Basics
  - Things Influence Other Things
  - Same Direction (Add) Influences
  - Opposite Direction (Subtract) Influences
  - Constant Contribution Influences
- Feedback Loops
  - Influence and Feedback
  - Reinforcing Loops
  - Balancing Loops
- System Archetypes
  - Models of Universal Behavior
  - Accidental Adversaries
  - Drifting Goals
  - Escalation
  - Fixes that Fail
  - Limits to Success, and Growth & Underinvestment
  - Shifting the Burden
  - Success to the Successful
  - Tragedy of the Commons

Module Three
Systems Thinking Models
- Causal Loop Diagrams
  - Modeling Basics – Nodes, Links, and Loops
  - Modeling Basics – Time and Delay
  - Modeling Basics – Gaps
  - Modeling Basics – Side Effects
  - Modeling Systems – Scope of the Model
  - Modeling Systems – Tips and Techniques
- Stock and Flow Diagrams
  - Technique and Purpose
  - Additional Insight into Causal Loop Diagrams

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• Behavior over Time Graphs
  o Technique and Purpose
  o Additional Insight into Causal Loop Diagrams

Module Four
Systems Thinking and Business Analytics
• A Business Analytics Framework
  o Dimensions of Analytics
  o The Business Dimension
  o The Measurement Dimension
  o The Management Dimension
• Purposeful Analytics
  o Business Context
  o Goal Seeking and Correction
  o Growth
• Insightful Analytics
  o Cause and Effect Insights
  o Archetypical Insights
  o Insight and Learning
• Actionable Analytics
  o Measuring to Make a Difference
  o Views into the Future

Module Five
Systems Thinking and the BI Program
• Project Scoping
  o Defining Project Boundaries
• Business Requirements
  o Describing the Needs
• Change Management
  o Evolving Systems and Evolving Analytics
• Quality Management
  o Reliable Analytics
• Portfolio Management
  o Managing Analytic Resources
• Value Management
  o Making a Difference
• BI Capabilities
  o Enabling Real Intelligence

Appendix A
Glossary of Terms

Appendix B
Bibliography and References