Service-Oriented Modeling Framework
Patterns for Discovery and Analysis of Services
for SOA and Cloud Computing Projects

Methodologies Corporation
www.ModelingConcepts.com
• **Look in the box:** Analyze internal service composition and capabilities.

• **Look above the box:** Study best practices, service governance, and service life cycle disciplines.

• **Look below the box:** Perform separation of concerns, loose coupling, and granularity analysis.

• **Look out of the box:** Analyze interoperability, distribution, and relationships of services.
Service-Oriented Discovery Approach

- **Top-Down**: Two approaches for service discovery: Business Process-Driven and Attribute-Driven

- **Front-to-Back**: User interface and presentation layer service discovery.

- **Back-to-Front**: Service discovery driven by data artifacts.

- **Bottom-Up**: Service discovery based on existing architectures, applications, and technologies.

- **Meet-in-the-Middle**: Service discovery based on infrastructure requirements.
• **Contextual Generalization**: Increase service abstraction level and contextual boundaries.

• **Contextual Specification**: Decrease service abstraction level and contextual boundaries.

• **Contextual Expansion**: Expand service influence across an organization and widen its consumer base.

• **Contextual Contraction**: Contract service influence across the organization and trim down its consumer base.
Personal and Organizational Strategy

- **Structural Generalization**: Increase service internal structure.

- **Structural Specification**: Decrease service internal structure.

- **Structural Expansion**: Expand service distribution in deployed environments across the organization and beyond.

- **Structural Contraction**: Contract service distribution in deployed environments.