The Role of Business Process Modeling in Service-oriented Architecture Development

A Software Development Vendor Perspectives TechWebCast
Sponsored by Borland

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The Changing Face of Business Applications

2003

- “Buy” is preferred over “build,” but AD is still used for a major part of the portfolio
- “Application” focus on development
- Average project length is 8 to 12 months
- “Too much” cost and time
- Multiple/inconsistent architectures
- Little to no reuse

2008

- Focus on business process, workflow and architectures across the organization
- Deployment, not development
- Implement practices and technologies which promote shared solutions from IT and end user organizations
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- SOA and BPM dominate

Redefined BPM Roles and Responsibilities
Service-Oriented Architecture (SOA)

Loosely Coupled Service Invocation

- B2C
- B2B/A2A/C-Commerce
- ASPs, Subscription
- Browsers/Wireless

Service/Process Flow Management

- XML/SOAP/WSDL
- Business Process Management

Highly Interrelated Service Functionality

- Service Functionality:
  - Objects
  - Components
  - Data
  - Process

**New** BP Architects, Analysts and Owners

**New** BP Managers/Service Assemblers

**New** Service/Component and Integration Architects
# Multiarchitectural Governance

## Multiarchitectural Framework

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<th>Business Architecture</th>
<th>Technology Architecture</th>
<th>Application Architecture</th>
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## Key Architecture Roles

- Business Architect
- Technical Architect
- Service/Component, Integration Architects
- Data Architect

## Taxonomy/Methods

- Business Process Analysis
- Object Orientation/UML
- Structured Analysis/Structured Design
- Data Analysis and Design

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*Gartner*
Assigning Responsibilities

The business side will focus mainly on:

- Strategy and business case development
- Business performance metrics
- Process discovery
- Process design
- Simulation and optimization
- Process analysis
- Event analysis
- Change management
- Business rules discovery

In the short-term, business and IT will share responsibility with:

- Process deployment
- Process execution
- Business and process rules implementation
- Operational procedures, including version level control
- Creation of process, rules and events repository
- Reporting
- Training and education

IT side responsibilities include:

- Standards for both technical and best practice procedures
- Templates and frameworks to support discovery and deployment
- Scalability issues supporting scope and complexity
- Process-level and systems-level security
- Tools evaluation, testing and integration
- Fault tolerance and redundancy
- Clustering and load balancing
Sample BPM/SOBA/SODA Roles

- BP Architect
- BP Analyst
- BP/Workflow Mgr
- HTML Author
- Graphics Artist
- Enterprise Architect
- Data Architect
- UML Analyst
- Services Architect
- QA Tester
- Integration Architect
- Web Master
- Component Architect
- System Administrator
- Tech. Architect
- Repository Admin.
The Roles in Interaction

- Business Architects/UML Analysts
- Business Process Managers
- Service Assemblers/Developers
- Component Developers
- Technical Architects
- Service/Component and Integration Architects
- Data Architects/DBAs
- Component Developers

Business Process Architecture, A&D
- Application Arch.
- UI A&D
- Class/Data A&D

(Logical) Service Requirements

(Logical) UI and Bus. Reqs.

Available Services

BP/ Workflow Management

Integration, Service and Component Architecture and Design

Component Data Reqs.

Component Specs.

Complex DB Design

Complex CBD

Service, UI and Simple CBD

(Technical) Service Assemblers/Developers

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BP Owner Role

- **Business Process Owner**
  - Authority over cross-functional processes
  - Higher level authority than any sub process and activity/task owner
  - Dotted line to “Chief Governance Officer”

- Responsibilities:
  - Owns the process design/model
  - Monitors compliance with process policies
  - Defines process metrics that support corporate performance objectives
  - Maintains SLA for users of the business processes.

*Process governance is a journey, not a destination*
**Business Process Architect**: The business process architect focuses on the human, organizational and value stream aspects of business processes and their transformation.

- Gaining consensus of internal constituents around new concepts
- Identifying business performance and incentive metrics
- Drafting organizational alignment requirements
- Designing the organization’s hierarchy of process for creating a reusable repository
- Leading the execution of building and sustaining a process-managed organization.

*Note: Business process architects need to be able to coordinate business architectures across organizational units.*
BP Analyst Role

- **Business Process Analyst**: The business process analyst deals with the more tactical aspects of discovering, validating, documenting, and communicating business process related knowledge through modeling, simulating, and analyzing both current and future states.
  - Demonstrate to the organization opportunities for best-in-class, disciplined and shareable process knowledge.
  - Embrace methods, techniques, notations, standards and best practices.
  - Show the organization the best way to identify problems and to solve them.
Concerned with the inter-relationships and dependencies between business activities.

Focused on understanding the events that cause different courses of action.

Determined to learn the rules that govern business decisions.

Not concerned with the underlying information processing issues.

Not focused on understanding the data integration challenges.

Not determined with learning about scalability, fault tolerance, and network load balancing like issues.
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Redefined BPM Roles and Responsibilities
MAXIMIZE THE BUSINESS VALUE OF SOFTWARE

Together®
Role-based visual modeling platform for software teams
Software Drives Business Value

Information

Software

Value

- Visibility
- Control
- Agility
Significant Challenge: Communication And Process

Visual Models can fill the gaps between Roles

SOA places new demands on the communication between the Business Analyst and the Software Architect
Polling Question #1

Are you using visual languages or modeling in your development activities today?

- IDEF
- BPMN
- UML
- Other
- None at this time
Polling Question #2

Please check the role or roles you perform: (more than one possible answer)

- Software Engineer
- Technical Architect
- Business Architect
- Data Architect
- Business Process Analyst
- Other
Team Communication Problems

- Teams building SOA need to connect business to IT
  - Communication that simplifies by focusing on value
- Teams need a common view for all roles
  - What exists today and what is needed in the future.
Every business needs a set of strategic objectives that employees and partners aim to achieve such as a common:
- Vision
- Mission statement
- Business direction or plan

An organization works together subject to policies and regulations, relevant practices and standards, and established procedures to achieve these goals. The fundamental policy bringing these together is a business process.

Underlying every business has a set of services that define:
- how that business operates (HR, ERP, Legal)
- how it generates revenue (Orders, Claims, Manufacturing)
- how it supports its customers (Technical support, Recalls, Warranty)

Business Process Modeling captures these details
- Business processes are a very strategic and critical asset
- Models allow a team to capture and articulate Business Processes
What is Together®?

- Role-based visual modeling platform for software teams

- Together® provides **model-centric productivity** tools for **business analysts, designers, architects, and developers**.

- For development teams, Together® enables **communication** across roles, **control** over quality and design, and the foundation for **model-centric architectures** such as SOA and MDA.

- **NEW** - For business analysts, Together® provides a graphical notation for capturing **business processes**.
Why a Visual Modeling Platform?

- Capture the business processes
- Connect models to requirements
- Transform business processes to software architecture
- Create documentation from models
- As accurate representations of both the strategic and tactical visions
Business Process Modeling

- **Bridge the gap to Business**
  - Understand what you do
  - Communicate new directions
  - Validate the impact of IT projects

- **Together® now supports BPMN**
  - Business Process Modeling Notation captures processes graphically
    - Diagrams be validated
  - BPMN can be used to generate BPEL4WS
  - BPMN models can be transformed into UML
Together – Visual Modeling for the Entire Team

- Model-Driven Architecture™ (MDA) Support
  - UML™ 2.0 Modeling with OMG’s QVT and OCL 2.0
- QA -Audits & Metrics for Code and Model
  - Improve quality and maintainability
- Business Process Modeling
  - Business Process Modeling Notation (BPMN)
- Modeling with LiveSource™
  - Visualization with accuracy
- Documentation Generation
  - Automated and always up-to-date
- Design Pattern Support
  - Promote reuse and improve quality
Borland’s Together is a role-based visual modeling platform for software teams. Borland’s Together provides support for:

- Business Architects
- Technical Architects
- Data Architects
- Developers

Borland’s Together can bridge the communication gap between individual roles building Service-oriented architectures (SOAs) based on Business Processes.
Q&A

Please Submit Your Questions Now
Resources

Together Product Information

Application Lifecycle Management

Software Delivery Optimization

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