

Business Centric Methodology (BCM) Creating practical tools for business integration

The BCM Foundation — Starting from a perspective of semantic relationships, BCM aims to enable business collaboration with a set of tools that help business groups to work together for mutual benefit. The aim is to provide a foundation for well-defined interaction among groups that may be accustomed to differing business vocabularies and patterns of behavior.

The BCM approach has developed its own version of a layered architecture ... which also defines a process for moving from fundamental business concepts to the implementation of business and technical interoperability requirements. This builds on a long tradition of efforts to integrate business strategies and needs with management of the changing information technology infrastructure. The emphasis here, however, is on requirements for interchange among Communities of Interest.

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Organization for the Advancement of Structured Information Standards (OASIS)

Stakeholder(s):

Business Centric Methodology Technical Committee :

Mike Lubash :

Co-Chair

Bruce Peat :

Co-Chair

Business Groups

Businesses :

Business Impact —

- *Reduced time-to-market - rapid response changing business requirements.*
- *Reduced cost of adaptation to changing market and technical conditions.*
- *Ease of negotiation for business and technical coordination.*
- *Reuse of knowledge, people, capital assets across business units and processes.*
- *Visibility of business capabilities to stakeholders.*
- *Integration of performance measures with change management and investment strategies.*
- *Ability to prioritize investment and management attention based on business impact.*
- *Reduced cost and complexity through elimination of redundant business processes and technical assets.*

Technicians :

Technical Impact —

- *Low-cost adaptation to new technologies.*
- *Implementation of metadata management and semantic mapping capabilities.*
- *Ability to redistribute services among business and technical communities.*

Customers :

Customer Impact —

- *Customer empowerment – BCM enables customer to be both consumer of business services and expert creator of business services.*
- *Ability for business services to adapt to real-time customer requirements.*

Communities of Interest :

The BCM approach builds on a number of core concepts. Among the most important is that of Community of Interest. This concept follows from the recognition (validated by formal

network theory) that interacting entities, whether they be people, organizations or technical systems, tend to coalesce in groups with common characteristics, such as purpose, vocabulary and behavior. In a business environment, the communities may be defined by formal or informal organizational structures. The unique features that define one community, however, may also act as barriers to interaction with other communities. The BCM approach addresses these inhibitors to interaction from an integrated business perspective. Working from a formal understanding of the “ontologies” that characterize the communities, the BCM approach enables the definition of collaborative business patterns, which support contracts, the vehicle for formal interaction among the interacting communities.

Large Organizations :

BCM in Practice — The BCM approach can have its greatest impact in organizations that are composed of multiple business units or which must operate across an extended business network. Complexity in the structure of the business relationships is the rule not the exception. The need for improved integration across business boundaries is widespread in both the public and private sectors. A few examples:

Financial Services :

More often than not, financial services companies have grown through mergers and acquisitions. They often consist of multiple service organizations with overlapping and duplicative functions and services. The financial services company has typically invested a great deal in its ability to collaborate with sister financial institutions like banks, regulatory agencies and other service organizations. To reduce time-to-market for new services and create more flexible interactions with customers, many of these companies are struggling to create workable mechanisms for interoperability and more effective delivery of services to customers. BCM offers a path to meeting those objectives.

Public Sector :

Like financial services, information systems within public sector organizations have grown as stove-piped operations within isolated business units.

Office of Management and Budget :

Programs such as the federal enterprise architecture effort under the Office of Management and Budget (OMB) and parallel initiatives within the Defense Department have established broad goals for interoperability and reuse of business services, data, and technology components. The challenge is to create the business framework to focus investment on feasible initiatives within limited budgets. The BCM offers one means to meet those objectives.

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Stakeholders (continued)

Defense Department

IRS :

As one example of a mechanism that implements semantic transformation and mediation, the IRS has a business relationship with millions of customers it hardly knows. It imposes highly complex business rules on customers of varying business skills. That relationship is mediated through the common language of tax preparation software (and the accounting community). The best of that breed transforms the complex language and business rules of the IRS into a form that is meaningful to a broad set of customers.

Norway :

There are other examples of application of BCM principles, such as the pilot of government service delivery under the Electronic Process program (EPR) in Norway. The program addresses service delivery requirements in diverse domains such as construction and healthcare and provides integrated mechanisms for information access and collaboration.

U.S. Federal Sector :

The EPR effort represents a model of how to combine practical implementation with standards development that enables replication of that experience in multiple environments. Similar initiatives are being undertaken in the U.S. federal sector.

Pharmaceutical Industry :

Pharmaceutical Research — The pharmaceutical industry faces a challenge of reducing time-to-market through more efficient clinical trials. But the culture of the research and IT communities is distinct from the clinics in which the trials are carried out. The industry is also faced with a highly diverse set of communities of interest, each research specialty characterized by its own set of jargon, ways of doing business, and set of professional practices. Getting drugs to market faster is worth billions of dollars to the industry. That goal is impeded by challenges of semantic transformation and other issues of business interoperability. The BCM approach and complementary tools offer a path out of that quagmire.

Vision

Business groups to work together for mutual benefit

Mission

To enable business collaboration

Values

Coordination: Benefits of BCM -- Organizations that follow the BCM process will experience a number of benefits, some of which overlap with the effects of other enterprise architecture approaches and some of which are unique to BCM. In general terms, the BCM methods aim to implement conditions that smooth business operations among multiple communities. These conditions include:

Strategic Alignment: Alignment of priorities and interests among multiple business units or communities.

Priorities

Interests

Visibility: Visibility and understandability of technical and business requirements.

Understandability

Predictability: Predictable and effective orchestration of business and technical relationships among business parties.

Orchestration**Relationships**

Interoperability: Alignment of business and technical strategies for interoperability.

Negotiation: Support for negotiation mechanisms and contract monitoring among business parties.

Monitoring

Flexibility: Loose coupling between business capabilities and technical implementation.

Adaptability: Rapid adaptation to evolving business and technical integration standards.

Standardization: BCM and the Standards Process -- A primary guiding principle of the BCM approach is the use of open, transparent communication and standards.

Openness**Transparency****Communication**

Interaction: The BCM products have evolved through interaction with a number of other technical committees and continue to profit from contributions within and beyond the standards development communities. In particular, there is ongoing collaboration with work on registries, ebXML, e-government and other efforts to implement standards, technologies, and practices that promote interoperable business operations.

1. Concepts

Understand the semantics of the business.

The Conceptual layer improves the understanding of the semantics by aligning the terminology of the business and uncovers the operational meaning of the business vocabulary. In this layer, the business managers determine the solution requirements and use BCM templates to acquire information regarding business collaboration needs. The relevant data includes information on business goals, project boundaries, the participants, the Community of Interest, use cases, and business events.

1.1. Goals

Determine the business goals.

1.2. Boundaries

Establish the project boundaries.

1.3. Participants

Identify the project participants.

1.4. COIs

Identify the Community of Interest.

1.5. Use Cases

Document the use cases.

1.6. Events

Document the relevant business events.

2. Goals

Understand the business goals.

The Business Layer develops an understanding of the core business goals that the “preferred” business objects must accomplish and constrains them according to defined business processes and patterns. This layer captures formal business rules and identifies opportunities for reuse of process components and related business domain knowledge.

2.1. Business Rules

Capture business rules.

2.2. Processes

Identify opportunities for reuse of process components.

2.3. Knowledge

Identify opportunities for reuse of business domain knowledge.

3. Implementation

Define potential implementation options.

The Extension Layer defines potential implementation options and provides the view needed for mapping the required interoperability requirements to industry practices, organizations, standard bodies, and internal legacy system formats.

3.1. Practices

Map interoperability requirements to industry practices.

3.2. Organizations

Map interoperability requirements to organizations.

3.3. Standards Bodies

Map interoperability requirements to standard bodies.

Stakeholder(s):

Standards Bodies

3.4. Formats

Map interoperability requirements to internal legacy system formats.

3.5. Templates

Capture information in a way that can be reused over time and among participating organizations.

How to use BCM BCM Implementation Process and Supporting Tools — The BCM approach is designed to be more than a vision for inter-enterprise operations. It aims to become a repository of methods and tools for implementing the envisioned world of interoperability. The BCM community is actively developing tools that assist with the achievement of the BCM implementation framework by working closely with selected industry initiatives. A growing set of templates for captures critical information in a way that can be reused over time and among participating organizations. The templates are designed to create a consistent body of information for all layers of the business architecture, from business ontology to contractual relationships among individuals and communities. The templates work with familiar desktop tools and do not require specialized software. These templates include:

Stakeholder(s):

BCM Community

3.5.1. Strategies

Implement strategies for interoperability.

A defined process for moving from conceptual semantic and business foundations to implementation of strategies for interoperability.

3.5.2. Capabilities

Analyze and reuse business and technical capabilities.

A modular approach to analysis and reuse of business and technical capabilities.

3.5.3. Patterns

Capture replicable knowledge.

Use of patterns to capture replicable knowledge.

3.5.4. Metadata

Manage metadata.

Implementation of metadata management.

3.5.5. Standards

Apply standards for interoperability and contracts.

Interoperability standards / contracts.

3.5.6. Negotiations

Negotiate among COIs.

Inter-community negotiation mechanisms.

3.5.7. Performance

Monitor and manage performance.

Performance monitoring and management tools.

3.5.8. Artifacts

Manage artifacts.

Artifact management for semantic interoperability.

3.5.9. Registry

Use a standard registry.

Use of a standard registry to enable access to processes and other business and technical artifacts.

3.5.10. Other Artifacts

Use other artifacts.

Specific data dictionaries, lexicons, taxonomies, thesauri, topic maps and ontologies.

3.5.10.1. Data Dictionaries

Use data dictionaries.

3.5.10.2. Lexicons

Use lexicons.

3.5.10.3. Taxonomies

Use taxonomies.

3.5.10.4. Thesauri

Use thesauri.

3.5.10.5. Topic Maps

Use topic maps.

3.5.10.6. Ontologies

Use ontologies.

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4. Interactions

Support business interactions.

The Implementation Layer provides the specific mechanisms that support business interactions among communities. The implementation will follow from templates based on existing standards, proven technology and reusable business components.

4.1. Standards

Use existing standards.

4.2. Technology

Use proven technology.

4.3. Components

Reuse available business components.

Administrative Information

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Submitter:

Given Name: Owen

Surname: Ambur

Email: Owen.Ambur@verizon.net

Phone: