

Development Challenges

The FORM Methodology seeks to provide a component-oriented approach to development of management systems for B2B.

A Two Pronged Approach

- Provide methodological guidelines for development of re-usable components called Building Blocks (BB)
- Provide methodological guidelines for construction of B2B management solutions.

Development Stakeholders

The FORM methodology consists of two development guidelines.

The first guideline helps management component vendors develop Building Blocks.

The second guideline helps a management systems developer or solutions provider to implement management business processes – e.g. accounting, quality of service assurance, order fulfilment – using Building Blocks.

Guidelines Objectives

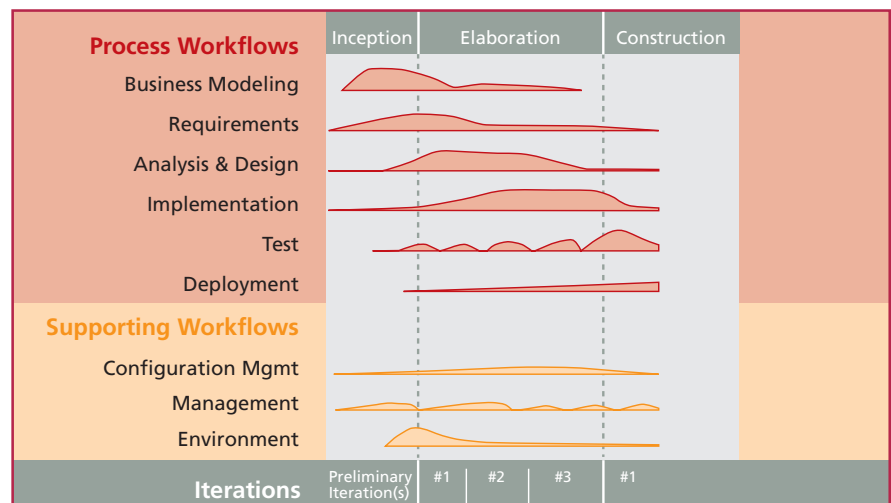
Guideline 1 – To develop re-usable Service & Network Management Building Blocks for B2B e.g. SLA Management BBs, Accounting BBs etc., called the FORM Building Block Development Guideline.

Guideline 2 – To construct Management Systems from re-usable Building Blocks – a Business Process Driven Approach, called the FORM Business Process Development Guideline.

Guideline 1 – Developing Management Building Blocks

The Building Block Guideline extends aspects of the Unified Development Processes and uses UML notations throughout.

More specifically it customises its development phases & iterations, models to be developed, artefacts to be developed, and Unified Process documentation templates.



Building Block Specifications

A Management Building Block in FORM is a computing resource, which encapsulates useful B2B management behaviours and services.

- Each Building Block is packaged with a full description characterised by a set of Building Block Contracts
- A Building Block Contract Specification prescribes the services offered by the Building Block.

The Guideline supports the development of re-usable software components which are characterised by Building Block Contracts.

- FORM describes UML based guidelines, which customize the Rational Unified Process to support the modelling and development of re-usable Building Blocks
- This guidelines enables the extension of these Building Block Sets.

The Building Block Representation prescribes several UML models

- Use Cases – including Pre- and Post-conditions for each behaviour offered
- Interface Specification
- Information Models for Objects passed through the interface
- Technology description
- Building Block implementation
- Collaboration Diagrams illustrating Building Block usage of other Building Blocks.

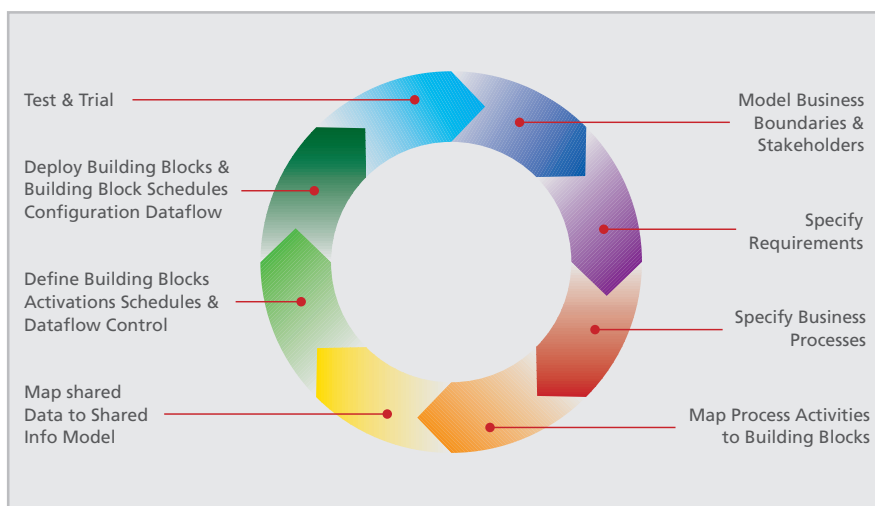
Guideline 2 – Business Process Development Guideline

Guideline 2 describes the design and development activities in implementing B2B management business processes using Building Blocks.

This Guideline outlines the steps needed in identifying stakeholder boundaries, requirements modelling, systems business process description and the mapping of management activities onto Building Blocks.

- Assists Management System Developers or Service Providers to construct B2B and B2C Management System using the Building Blocks
- Describes a Business Process Driven methodology for management system construction of Services from Building Blocks
- Provides modelling guidelines for process description and mapping to Building Blocks
- Prescribes the use of UML models and notations for system description
- Allows for several approaches to automating the management processes.

Customised Unified Software Development Process



Relation to Unified Process Model and TM Forum

The principles of the artefacts developed using the FORM Building Block Guideline extends aspects of the Unified Development Processes and uses UML notations throughout.

More specifically it customises its development phases & iterations, models to be developed, artefacts to be developed, and Unified Process documentation templates.

The principles of the artefacts developed using the FORM Methodology are closely related to those being established in the TM Forum. More specifically, the Guidelines seek to provide a methodological bridge between a Business Process approach and their implementation using Building Blocks.

Information + Contact

Further information on the Development Methodology as well as an additional white paper addressing the FORM Methodology is available at www.ist-form.org

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