

Software Engineering G22.2440-001

Session 2 – Sub-Topic 2 Presentation Strategy Alignment Elicitation Methodology

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Objectives

- Explain the Strategy Alignment Elicitation Approach
- Describe Requirements Engineering Activities
- Relate to Other Strategy Alignment Enablers

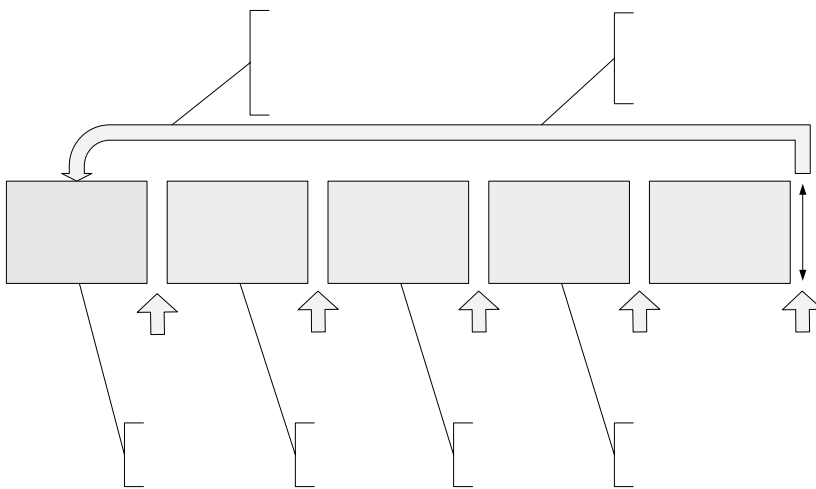
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Part I

Strategy Alignment Elicitation Methodology

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Generic Transformation Methodology



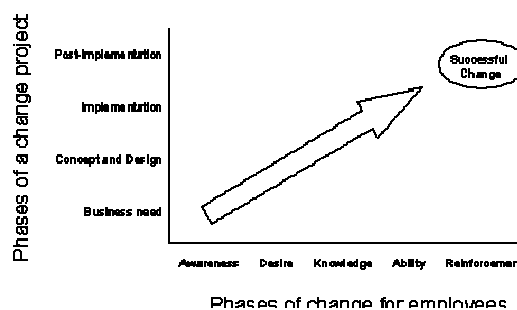
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Awareness-Desire-Knowledge-Ability-Reinforcement (ADKAR)

- See <http://www.change-management.com>)
- A goal-oriented change management model that allows change management teams to focus their activities on specific business results
- Model initially used to align traditional change management activities (e.g., communications and training) to a given result or goal during organizational change

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ADKAR Underlying Framework



- Framework is used to handle change initiatives.
- Change happens on two dimensions: the business dimension (vertical axis) and the people dimension (horizontal axis)
- Successful change happens when both dimensions of change occur simultaneously.

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Strategy Alignment Elicitation Methodology

- Inherits the characteristics of the generic transformation methodology
- Includes initiation, preparation, execution, hardening, and deployment phases
- Communications and training are the main change management activities encompassed by the family of Strategy Alignment methodologies

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Strategic Alignment Elicitation Methodology vs. ADKAR

- Business need activity on the business dimension of the ADKAR framework
 - Involves identifying a business need or opportunity and defining the scope and objectives of a project
 - Handled as part of a Strategy Alignment Elicitation methodology
- Concept and design, implementation, and post implementation activities on the business dimension of the ADKAR framework
 - Handled as part of a Strategy Alignment Execution methodology
- ADKAR covers all Strategy Alignment Elicitation and Execution on its business dimension
- ADKAR can be used to handle the change management activities required as a result of Strategy Alignment projects
 - ADKAR provides an excellent complement of managerial activities in addition
- ADKAR may be viewed as the meta-change management methodology from which the Generic Transformation Methodology is derived

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Strategy Alignment Elicitation vs. Strategy Alignment Execution

- Both inherit the characteristics of the generic transformation methodology
- Strategy Alignment Elicitation Goal
 - Help gather a prioritized project map based on current strategic vision (i.e., implements “EBAM” Project Roadmap Definition process pattern)
 - More conceptual
- Strategy Alignment Execution Goal
 - Implement the vision
 - More practical and detailed

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Incremental Aspects Strategy Elicitation Methodology

- Updating activities are built into the methodology as part of the Initiation and Preparation phases
 - Methodology designed to accommodate evolution so it can seed and revise Strategic Project Roadmaps on an ongoing basis
 - E.g., changes in strategic directions or adverse project findings while deploying the Strategic plan may motivate methodology updates
- Incremental nature of the Elicitation methodology
 - Meant to be aligned with ongoing re-evaluations of the project roadmap
 - Assumed, at least initially, that a single increment conducted in an iterative fashion will lead to a project roadmap that may be revised on a regular basis by re-applying (a possibly modified version of) the methodology
 - Initiation and preparation phases should enable the level of maturity required to create a project roadmap.

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Incremental Aspects Strategy Execution Methodology

- Updating activities are built into the methodology as part of the Initiation and Preparation phases
- Incremental nature of the Execution methodology
 - Meant to be aligned with a change management process within the organization
 - Example:
 - It may be that a set of BPM improvement projects created as part of a roadmap resulting from the application of the elicitation methodology need to be executed via several increments of an execution methodology to bring up the necessary organizational maturity to a level that makes it possible to carry on and use the end results of each individual project increment

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Initiation Phase: Strategy Elicitation Methodology (EM)

- The goal of the initiation phase is to assess the current level of maturity and the next achievable level
 - Department in charge of applying elicitation methodology may not have the level of planning maturity required to work with the updated version of the methodology
- No standard maturity levels specific to planning today
 - Rely on evolutionary improvement path suggested by the Business Process Maturity Model (BPMM) to identify levels of planning maturity
 - Example:

■ Level 4 - Optimized	- Capable planning (EM)
■ Level 3 - Standardized	- Effective planning (Hoshin)
■ Level 2 - Managed	- Controlled planning (MBO + PDCA)
■ Level 1 - Initial	- Hero worship (MBO)

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Initiation Phase: Strategy Elicitation Methodology (EM) (continued)

- Elicitation methodology leverages the MBO and PDCA strategic planning process patterns set forth in Hoshin
- It also complements Hoshin by leveraging modeling process patterns at planning time.
- Resulting planning approach minimizes the need for additional up-front analysis work at project execution time
- Typically, a single increment covering the entire scope of the project is used to create a project roadmap
- Actual planning work largely conducted by applying the following approaches concurrently
 - Pattern-driven modeling
 - E.g., modeling activities specific to SBAM, GDM, PEM, LSS, CBM
 - Pattern-driven planning
 - E.g., planning activities specific to MBO + PDCA as part of concurrent iterations
 - Concurrent threads generate results that are integrated as part of catch-ball phases inherent to the steps followed in the elicitation methodology execution phase

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Initiation Phase: Strategy Elicitation Methodology (EM) (continued)

- Example:
 - Original planning approach relies on the MBO planning pattern (Level 1 in the planning maturity hierarchy)
 - Planning team needs to transform its planning process to operate at Level 4 in the planning maturity hierarchy
 - Depending on the experience of the project staff, the transformation may be achievable in one step
 - The transformation may involve a fair amount of change management
 - Example: Planning activities driven by a combination of SBAM, GDM, PEM, and business solution pattern-specific modeling techniques (e.g., LSS for BPM Improvements, and CBM for SOA) identified as a result of the strategic goals elicitation and the subsequent business patterns elicitation
 - The planning maturity enablement effort required to transform the₄ planning team's maturity level is part of the EM preparation phase

Preparation Phase: Strategy Elicitation Methodology (EM)

- The Initiation and Preparation phases of the M1 methodology support the introduction of updates meant to accommodate changes in strategic directions or adverse project findings while deploying a Strategic plan
- While the goal of the initiation phase is to assess the planning maturity level transformation scope, the preparation phase is responsible for implementing the associated change management effort and planning the execution phase.

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Preparation Phase: Strategy Elicitation Methodology (EM) (continued)

- Sample Training Change Management Effort
 - Various roles in the team need to be trained to understand and apply SBAM, GDM, PEM, LSS, and CBM techniques
 - Sample sources of training information for strategic planning (MBO, PDCA) and standard business architecture modeling techniques (i.e., SBAM, GDM, and PEM) identified as follows:
 - MBO & PDCA:
 - Hoshin Handbook
 - SBAM:
 - Business Process Modeling Notation - BPMN (<http://www.bpmn.org/>)
 - Semantics of Business Vocabulary and Business Rules SVBR (<http://www.bpmi.org/>)
 - Unified Modeling Language - UML 2.0 (<http://www.uml.org/>)
 - GDM:
 - Business Motivation Model - BMM (<http://www.bpmi.org/>)
 - User Requirements Notations (www.usecasesmaps.org)
 - PEM:
 - Custom training (e.g., EAMF)
 - The Open Group Architecture Framework (www.togaf.org)

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Preparation Phase: Strategy Elicitation Methodology (EM) (continued)

- **Sample Training Change Management Effort
(continued)**
 - Training information for the business solution pattern-specific modeling techniques
 - CBM for SOA
 - IBM's Component Business Modeling approach
 - LSS for BPM Improvements
 - Training for LSS requires an assessment of maturity level in relation to the Six Sigma Maturity Level or the BPMM industry standard
 - Example:
 - Step 1: A Six Sigma black belt estimates that the current BPMM level is launch level and the next BPMM maturity level achievable by transformation is BPMM Level 2
 - Step 2: A transformation training program is put together to reach BPMM Level 2 and corresponding transformation training modules are developed and/or obtained

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Preparation Phase: Strategy Elicitation Methodology (EM) (continued)

- **Project Roadmap Definition Planning**
 - Another aspect of the preparation phase is the planning of the execution phase
 - Since the goal of the execution phase is to conduct a strategic planning project and generate a strategic plan, the goal of the preparation phase is to plan how the strategic planning project will be performed in the execution phase
 - It is assumed here that the planning activities are driven by a combination of SBAM, GDM, PEM, and business solution pattern-specific modeling techniques
 - While the planning activities complement those of Hoshin, the general planning structure suggested by Hoshin still applies in this context and will be used as the end of the execution phase to create the strategic plan either manually using the forms provided in the Hoshin Handbook or using the TQE software provided on the CD included in the Hoshin Handbook

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Preparation Phase: Strategy Elicitation Methodology (EM) (continued)

- Sample Project Roadmap Definition Planning (continued)
 - Actual sequence of activities to follow in the execution phase in order to obtain the data that are typically used as a basis for the strategic plan can be summarized as follows:
 - I. Requirements Engineering Activities:
 - I.1. CS Requirements Definition
 - I.2. FS Requirements Definition
 - I.3. Tests Requirements Definition
 - I.4. Requirements and Tests Management Plans
 - II. EAMF Requirements Model (RM) Engineering Activities:
 - II.1. CS EAMF Requirements Model Definition
 - II.2. FS EAMF Requirements Model Definition
 - II.3. Traceability (Between Requirements and RM) Documentation
 - II.4. High-Level Scope Definition via GDM and SBAM
 - II.5. CS BA Modeling using PEM
 - II.6. BA Foundation Model Definition Using SBAM
 - II.7. CS BA Modeling Using SBAM
 - II.8. CS BA to High-Level Goals Relating Using GDM
 - II.9. Defects and Waste Elicitation via LSS
 - II.10. FS BA Modeling Using GDM
 - II.11. RM & RTM Update

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Preparation Phase: Strategy Elicitation Methodology (EM) (continued)

- Project Roadmap Definition Planning (continued):
 - III. Business Architecture Analysis Activities:
 - III.1. Business Needs Analysis
 - III.2. Entities/Relationships Refinements
 - III.3. Goal Model Gap Assessment Between CS and FS BA
 - III.4. Business Model Improvement Gaps Documentation
 - III.5. Pattern Model Gap Assessment Between CS and FS
 - III.6. Project Prioritization Model Deployment
 - IV. Strategic Plan Compilation Activities:
 - IV.1. Business Fundamentals Planning
 - IV.2. Breakthrough Planning

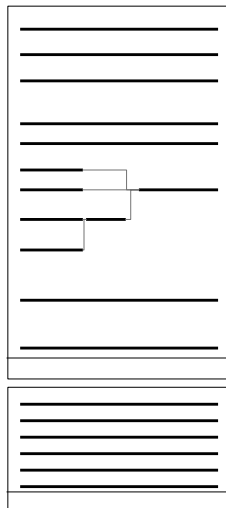
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Part II

Practical Requirements Engineering

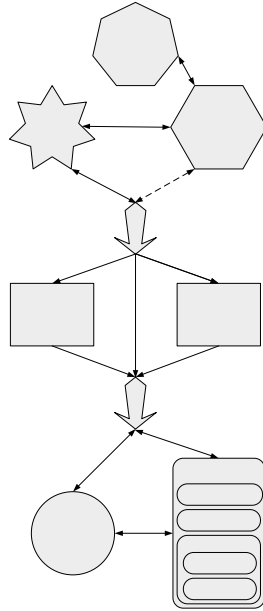
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Project Requirements Types & Enterprise Requirements Categories

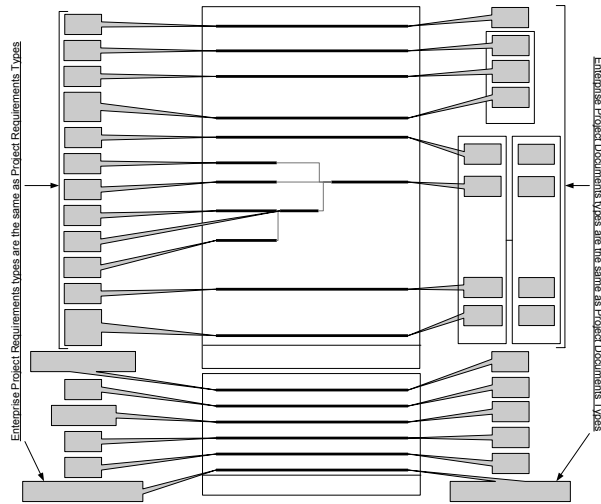


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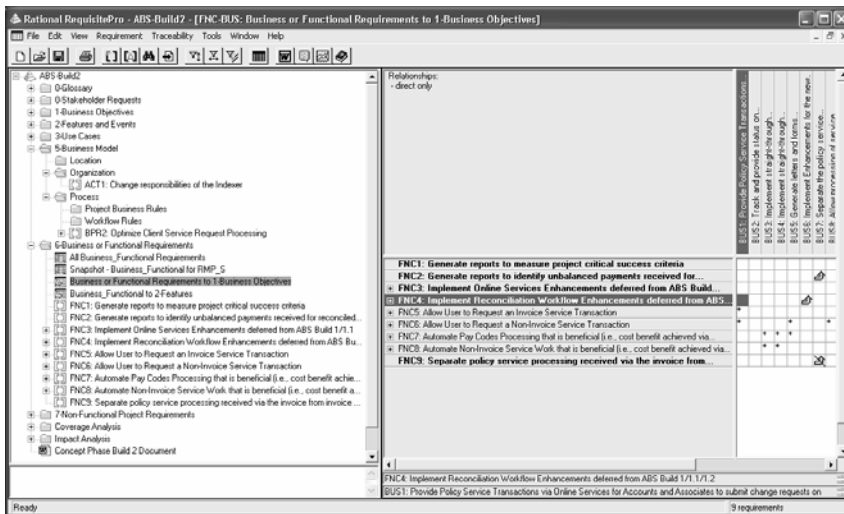
Requirements Traceability Graph



Use of IBM Rational ReqPro for the Requirements Engineering Phase



Sample Requirements Definition



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Part III

EAMF Strategy Enablement Aspects

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Enterprise Architecture Management

EAMF Activities Integrate Seamlessly with Company X's Project Lifecycle

Disciplines & Process

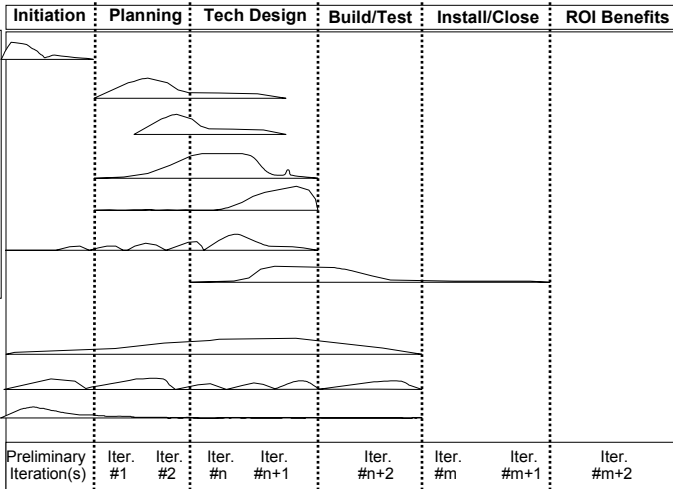
SDLC Stages

Workflows

Enterprise Planning
High-Level Analysis
High-Level Design
Detailed Analysis
Detailed Design
Product Mapping
Deployment

Supporting Workflows

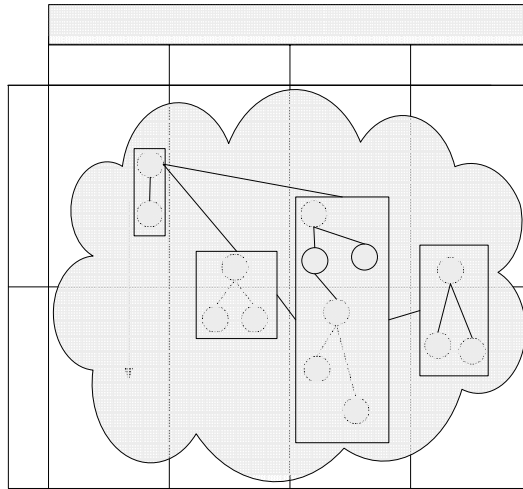
Administration
Management
Environment



Iterations

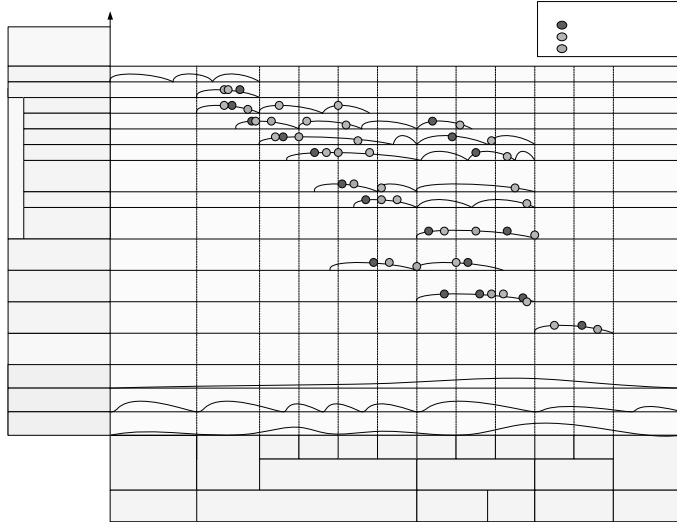
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Building Pattern Cluster Networks via EAMF Activities



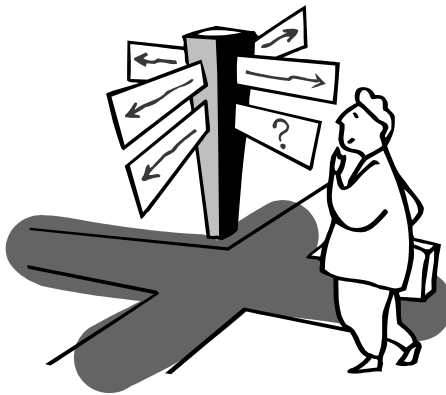
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EAMF-Augmented Iterative/Incremental SDLC



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Any Questions?



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D
Proc
Req
E
A
M
F In
Pr

App