



Project Monitoring and Control; RLCA Package and ARB Guidelines

**CS 577b Spring 2002 Lecture
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Outline

- **Overall structure of Life Cycle Plan (LCP) and subsidiary information**
- **Relation to CMMI Monitoring and Control activities**
- **RLCA Package and ARB Guidelines**
 - **Small project example: CS 577 e-services projects**
- **Transition Plan Preparation homework**
 - **Due Wed., Feb. 6**

MBASE Life Cycle Plan Guidelines

- 1. Purpose and Assumptions (why? whereas?)**
- 2. Milestones and Products (what? when?)**
- 3. Responsibilities (who? where?)**
- 4. Approach (how?)**
 - 4.1 Monitoring and Control**
 - 4.2 Methods, Tools, and Facilities**
 - 4.3 Configuration Management**
 - 4.4 Quality Management**
- 5. Resources (how much?)**



CMMI Monitoring & Control and CS 577b - I

- 1. Track product and task attributes**
 - Use risk-based Goal-Question-Metric Approach
 - Example: network bandwidth and main memory
- 2. Track project performance**
 - Weekly and major-milestone reviews
 - Increment plan, test plan, and transition plan tracking
 - Effort reporting; COCOMO updates
- 3. Monitor critical facilities**
 - As necessary; risk-based
 - Example: availability of ISD Unsupported server
- 4. Project commitment change procedure**
 - LCA rebaseline; critical Construction rebaselines
 - Project meetings, email, client meeting minutes

CMMI Monitoring & Control and CS 577b - II

- 5. Monitor project risks**
 - Top-N risk monitoring risk plan milestone tracking; weekly progress reports
- 6. Review progress**
 - Weekly progress report meetings
- 7. Conduct milestone reviews**
 - LCA rebaseline (ARB), Core Capability Demo, Transition Readiness Review (ARB), Release Readiness Review
- 8. Take corrective action**
 - Revise plans and approaches
 - Negotiate and record stakeholder commitments
- 9. Software Development Plan Revision procedure**
 - LCA rebaseline; critical Construction rebaselines
 - Milestone plan updates
 - Increment plans, test plan, transition plans



RLCA Package and ARB Guidelines

- **LCA Package Revision Guidelines**
- **RLCA Grading Criteria**
- **RLCA ARB Presentation Guidelines**

LCA Package Revision: Major Sources of Change

- **New team members: LCP responsibilities**
- **New client objectives, constraints, priorities**
 - **OCD and change propagation elsewhere**
- **New alternatives and prototype features**
 - **Possible effects across LCA package**
 - **OCD 5 prototyping updates**
- **Feedback in LCA package grading**
 - **Mostly but not all in SSAD, LCP**
- **Changes to COCOMO cost drivers**
 - **Use of COCOTS for COTS-based systems**

New RLCA Package Component: Change Summaries

- **New Section 1.3 or 1.4 of each LCA package element**
 - **“RLCA Change Summary”**
- **Begin with short summary of element changes and rationale**
- **For all nontrivial changes, complete a simple schema (illustrated by “Example” for Web Mail SSRD)**

New RLCA Package Component: Change Summaries (cont.)

- Change: "Web Mail IOC changed to pilot operation"**
- Rationale: "Too risky to begin with full USC service"**
- Sections Affected Here: "5. Level of Service Requirements; 6. Evolution Requirements"**
- Sections Affected Elsewhere: "OCD4. Proposed System; LCP2. Milestones and Products"**



RLCA Grading Criteria (80 points)

- **15 -- Change Summaries' clarity, incisiveness**
- **50 -- Changes' clarity, responsiveness to change sources**
- **5 -- COCOMO II run and Data Collection form**
- **10 -- Conceptual Integrity**

Note: No one-size-fits-all detailed grading criteria



RLCA ARB Presentation Guidelines

- **All in SAL 322, February 14-15**
- **Arrange with client, sign up ASAP**

- **10 min: Summary of Change Sources and Resulting Changes**
- **10 min: Prototype Change Highlights (as appropriate)**
- **45 min: Major Change Descriptions**
- **15 min: General Discussions**



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CS 577b, Spring 2002
Individual Homework #3
Transition Plan Preparation
30 points. Due Wed., Feb. 6

- 1. Review MBASE Transition Plan Guidelines**
- 2. Identify your team's two most significant transition risk items**
- 3. Develop bulletized WWWWWHH plans to address these two risk items**

Grading Criteria

15 points per bulletized plan. Plan grade based on transition success relevance, realism, incisiveness



Example Bulletized Plan

- **Why: Ensure adequate data support for system test, IOC**
- **What, When:**
 - 2/28/02. Initial real data for CCD
 - 4/28/02. Critical mass data for system test, IOC
- **Who, Where:**
 - CCD data: Client and Team System Engineer
 - Test/IOC data: Client personnel
- **How:**
 - CCD: DB developer prepares data formats, performs initial data entry with client
 - Test/IOC: Client's workstudies enter data; client and DB developer review
- **How Much:**
 - CCD: 8 hrs System Engr; 4 hr Client
 - Test/IOC: 24 hr Workstudies; 2 hr. Client, 2 hr. DB developer



2. Preparing for Transition

- **Hardware preparation: purchases, installation**
- **Software preparation: licenses, rehosting, data**
- **Site preparation: facilities, equipment, communications**
- **Staff preparation: training, teambuilding, change readiness**
- **Operational test: criteria, procedures, personnel, instrumentation, analysis**

Critical Success Factors for Adoption - I

Application	Client Characteristics					Transition Preparation			Stable Envir.	Outcome	
	Focused	Representative	O & M Resources	Collaborative	Domain Knowledge	Software	Site	People		Client Success	Adopted
1996-97											
EDGAR Business Data	+	+		+	+	+			+	+	
Medieval Manuscripts	+			+	+	+			+	+	
Technical Reports	+	+		+	+	+				+	
Latin American Pamphlets	+	+		+	+	+			+	+	
Cinema-TV	+	+	+	+	+	+	+	(+)		+	(+)
Image Archives				+		+			+		
1997-98											
S-Charts	+	+	+	+	+	+	(+)	+	(+)	+	(+)
Global Express	+	+	+	+	+	+		+		+	
Hancock Virtual Museum	+	+	(+)	+	+	+	+	+		+	
Serial Control Records	+	+	+	+	+	+	+	+	(+)	+	(+)
B-School Working Papers	+	+	+	+	+	+	+	+	+	+	+
1998-99											
Data Mining	+	+	+	+	+	+	+	+	(+)	+	+
Dissertations	+	+	+	+	+	+	+	(+)	+	+	(+)
Hispanic Archive	+	+	+	+	+	+	+	+		+	
WWI Archive	+	+	+	+	+	+	+	+		+	(+)

Critical Success Factors for Adoption - II

Application	Client Characteristics					Transition Preparation			Stable Envir.	Outcome	
	Focused	Representative	O & M Resources	Collaborative	Domain Knowledge	Software	Site	People		Client Success	Adopted
1999-2000											
Oversized Object Viewing	+	+	+	+	+	+	+	+	+	+	+
East Asian Ingest	+	+	+	+	+	+	+	+	+	+	+
New Books List	+	+	+	+	+	+	+	+	(+)	+	(+)
Chicano/Latino Serials	+	+	+	+	+	+	(+)	+		+	
Vacation/Sick Leave Tracking	+	+	+	+	+	+	+	+		+	
Business/Reference Q&A's	+	+	+	+	+						
2000-2001											
Web Mail	+	+	+	+	+	+	+	+	(+)	+	+
Full text DB Search	+	+	+	+	+	+	+	+		+	
Dental Journal ToC	+	+	+	+	+	+	+	+	+	+	+
Pathology Slides	(+)	+	+	+	+	(+)	(+)	(+)	(+)	(+)	
Arch/Fine Arts Slides	(+)	+	+	+	+	+				+	
Velero Archive	+	+	+	+	+	+	+	+	+	+	+