

Empowering Project Estimation, Planning and Control

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Keynote:

Hitesh Sanghavi,

MD-Cunix Infotech,
SEI CMMI Lead Appraiser,
MBA, NLP, LA-ISO,
CQA,CPCD, BSCP, BB-6S



Estimation Purpose

- ★ Set and achieve organizational business goals by effective project management
- ★ Estimating and controlling sub processes management
- ★ Effectively estimates using metrics and reusable knowledge repositories like:
- ★ Estimation based on understanding process capability baselines
 - ★ Risks and Critical issues
 - ★ Estimation cases
 - ★ Defects – category wise
 - ★ Product Metrics
 - ★ Training Material
 - ★ Technology /LCM specific checklists
 - ★ Test cases



Estimation Paradigm

The Estimation Tussle:

- ★ Known and the unknown
- ★ Science and the Art
- ★ Theory and Practice
- ★ Chicken and egg : Metrics and estimate
- ★ Use of Experience or tools
- ★ Investments or Overheads
- ★ Guess-timates or Past-imates

Decision areas:

- ★ What and How much to estimate for this type of project?
- ★ How to use an "early warning" Earned Value for Interim Milestones
- ★ Managing estimation process, people, technology and tools

Life Cycles and Development Methodologies

- ★ Agile , XP, SCRUM, Crystal, Lean Development
- ★ Waterfall, iterative, spiral
- ★ Enhancements, maintenance or defect resolutions



Measure only that helps estimate further!

Schedule and Progress

- ★ Milestone Performance
- ★ Work Unit Progress
- ★ Incremental Capability

Growth and Stability

- ★ Product Size and Stability
- ★ Functional Size and Stability

Technical Adequacy

- ★ Technology Impacts/risks
- ★ Target Computer Resource Utilization

Resources and Cost

- ★ Personnel
- ★ Financial Performance
- ★ Environment Availability

Development Performance

- ★ Process Maturity/NC
- ★ Productivity

Product Quality

- ★ Defects, Complexity
- ★ Rework



Estimation and planning tips

- ★ Don't schedule people for more than 80% of their time
- ★ Build training time into the schedule-Respect the learning curve
- ★ Record estimates and how you derived them
- ★ Use estimation tools , as required
- ★ Plan Risk and contingency buffers
- ★ Enhance User Involvement, Executive support and Resources planning
- ★ Set Realistic Expectations (manage internal and external stakeholders)
- ★ Ensure Technology literacy
- ★ Incomplete/Changing requirements, not reflected in estimates
- ★ Effective communication among the Project Team
- ★ Recognizing if the Project is failing !!
- ★ Select right processes, rather than great (certified) processes.



★ Estimation Competencies



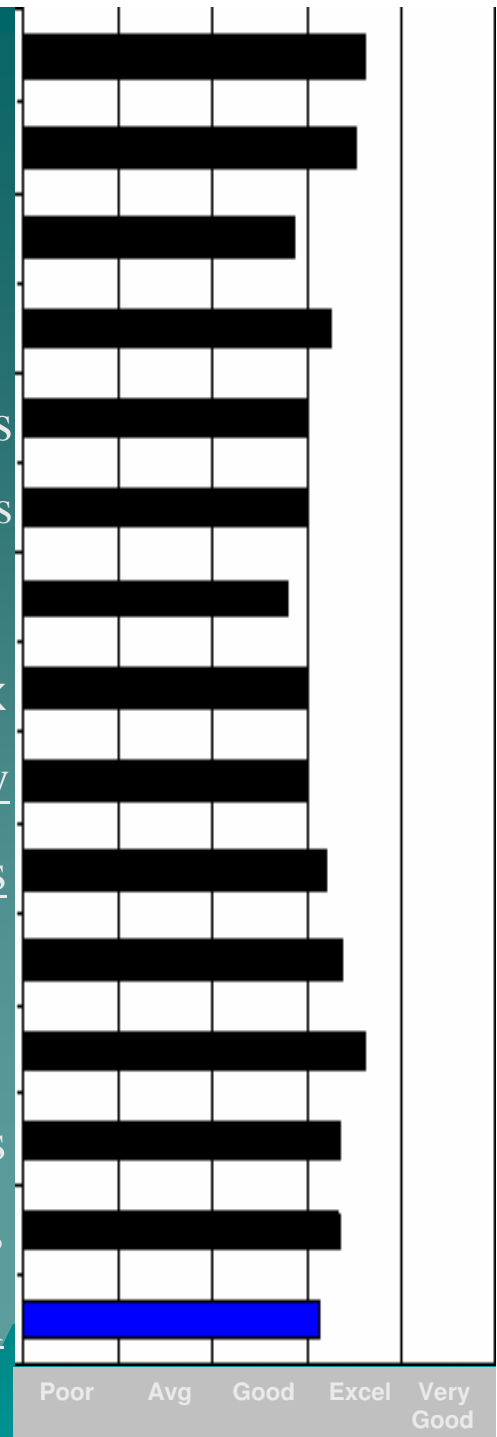
★ Enhanced Competencies of PM

- ★ Performance and Competence Management
- ★ PM Decision Drivers: Customer, Teams, Risk, Costs
- ★ Team Development, Charter, Leadership and Communications
- ★ Estimation as a Managed Process

- ★ 1 Establish an Organizational Policy
- ★ 2 Plan the Process
- ★ 3 Provide Resources
- ★ 4 Assign Responsibility
- ★ 5 Train People
- ★ 6 Manage Configurations
- ★ 7 Identify and Involve Relevant Stakeholders
- ★ 8 Monitor and Control the Process
- ★ 9 Objectively Evaluate Adherence
- ★ 10 Review Status with High-Level Management
- ★ 11 Establish a Defined Process
- ★ 12 Collect Improvement Information



Effectiveness/Adaptability in Teamwork (Global)
Professional understanding in day-to-day activities
Written/Oral communication level
Flexibility to respond to your special work request/process
Commitment to meet delivery dates / deadlines
Pro-activeness towards handling situations
Response towards meeting crisis
Quality of work
Meaningful Operational Transparency
Process improvements/cost reduction initiatives
Planning and re-planning effectiveness
Document control
Capability to learn, develop and implement new processes
Competence in meeting Customer requirements
Overall Comfort/satisfaction



Poor Avg Good Excel Very Good



Poor Estimate

Estimator Skills

Estimator Knowledge

Estimator Method

Poor Training

Skill Mismatch

Lack of Experience

Process Immaturity

Poor Mentoring

No Metrics

No History

No Benchmarking

HRM

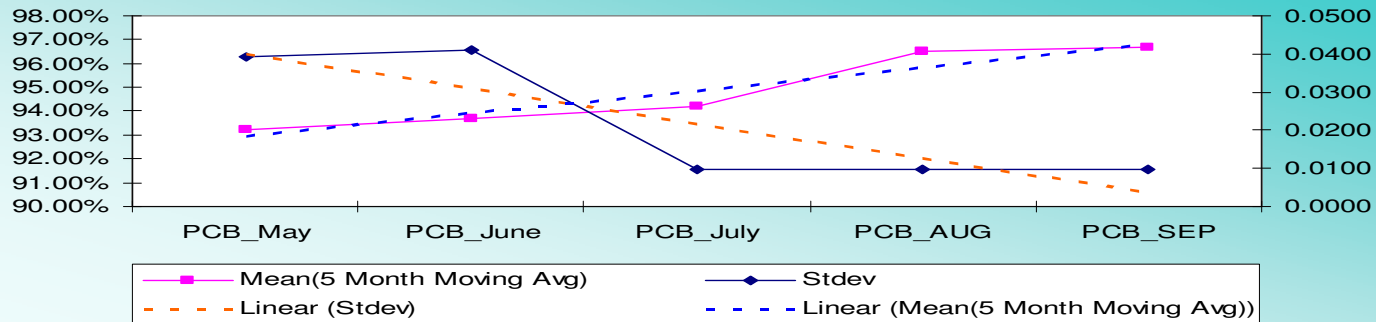
Poor Learning Habits

Fear

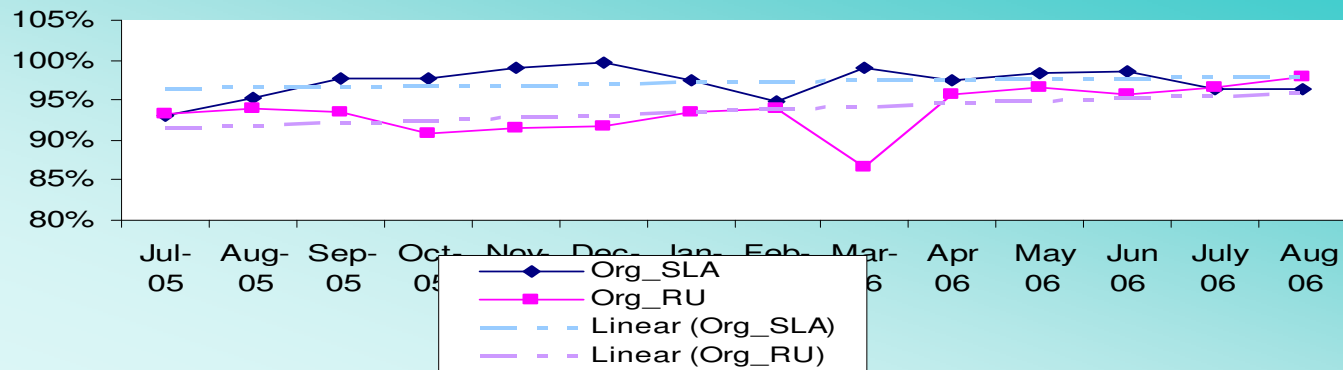
Management issues

PCB and Correlations

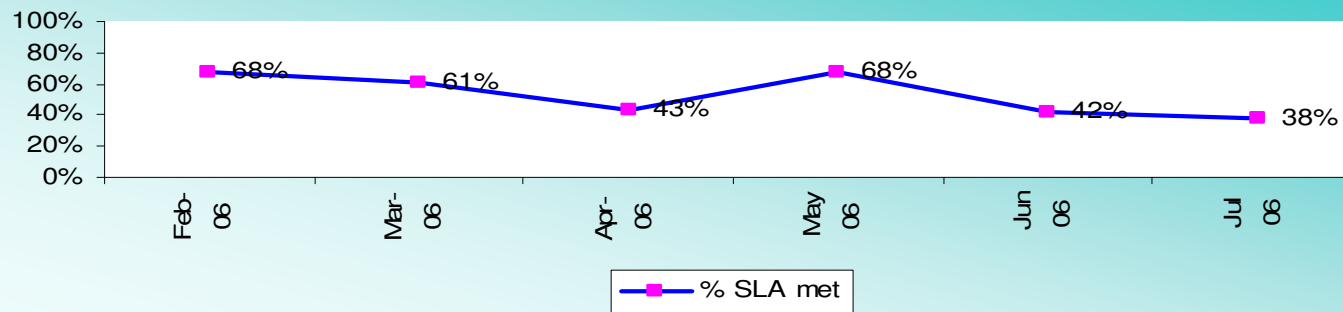
RU Trend for Moving Avg Mean & Std-Dev



Correlation_SLARU

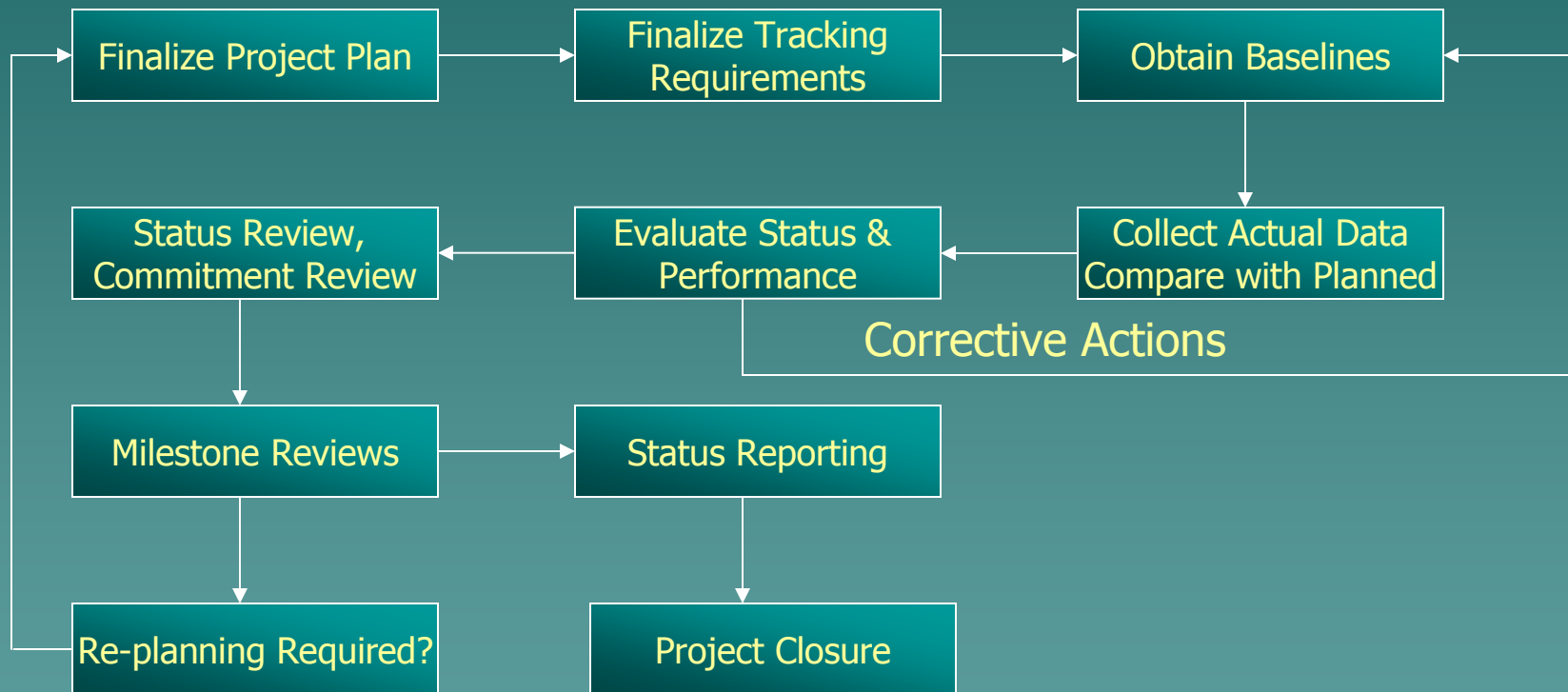


HR_Recruitment_Cycle_Time





Project Tracking Process

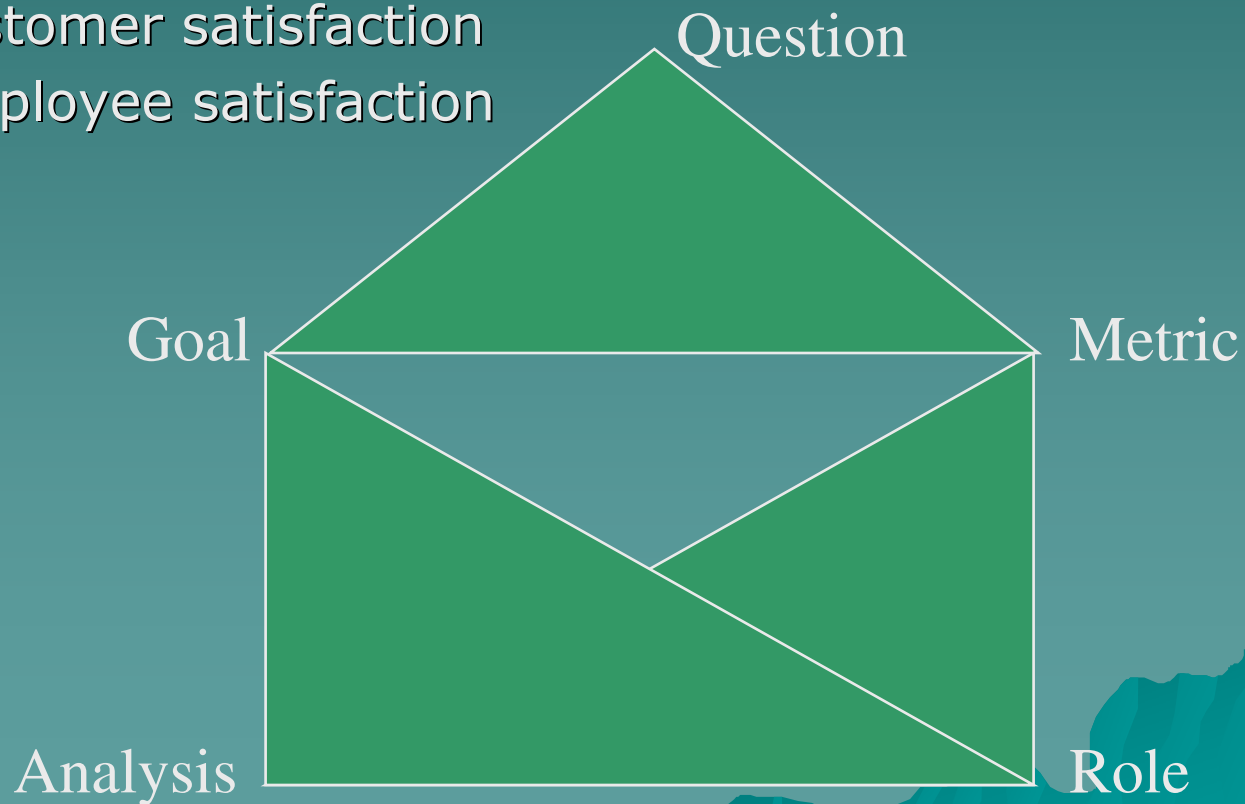




Open Envelope Model

Goal:

- ◆ Reduce cost of poor quality
- ◆ Improve productivity
- ◆ Improve software project planning
- ◆ Improve customer satisfaction
- ◆ Improve employee satisfaction

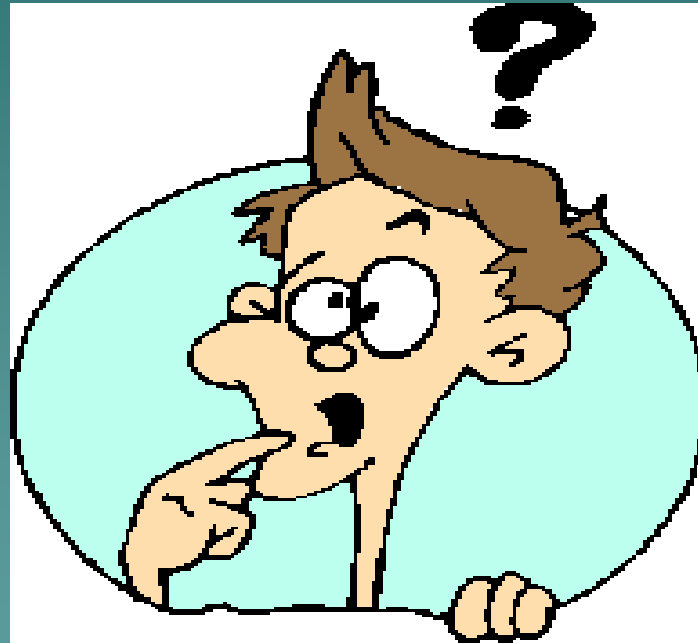




At the end : I choose to

Run a **Burning Train** or

Win with **Turning Brains** ?



Thank You