

## Project Life Cycles and the WBS

### Part Two: Generic Project Life Cycles

#### A Generic Project Life Cycle

In part one of this two-part series, we provided some examples of typical project life cycles for several types of applications.

Ignoring my own earlier advice to avoid defining a typical project life cycle, here is one of two variations on a framework that I like to use, when an application-specific phase-based does not exist:

- Pre-Project (Estimating, Proposal, Feasibility)
- Strategic Planning & Project Initiation
- Implementation Planning
- Implementation/Execution
- Termination/Closure

For the second variation, below, I have added lists of common activities within each phase and listed some of the system support requirements that are associated with each phase. These are just for guidance, and should not be considered either as complete, or as a standard.

#### **Concept (Pre-project or Proposal) Phase**

Every project begins with a concept. For traditional contract projects, this phase might include identifying a new opportunity, developing a proposal, and negotiating a contract. Overhead projects, or projects which result in new assets (capital projects), could begin by recognizing a need or issue, evaluating potential solutions, estimating resource requirements, determining a plan of action, and developing a project plan.

##### **Activities in Concept Phase:**

- Identify new opportunity
- Assess and develop new opportunity
- Prepare project proposal, resource requirements, and budgets, and for contract projects: price
- For contract projects: negotiate contract terms and conditions.
- Identify Objectives and Constraints
- Identify Milestones
- Perform Risk Evaluation

### **System Support Requirements in the Concept phase:**

During this phase, you need system support for:

- Planning
- Estimating
- Risk Analysis

### ***Inception (Initiation or Start-up) Phase***

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When you have decided to continue with the project, your project enters the inception phase. Milestones in this phase are commonly marked by the awarding of a contract or the funding of a project budget. If you were collecting the costs of all your proposed projects in one large pool, you would now create a project specifically for managing the approved initiative and optionally transfer the costs already accrued from the pool to the new project. You can even include the costs of planning the project on the project itself.

#### **Activities in Inception Phase:**

- Award Contract or Release Project
- Update and validate Objectives, Constraints, Milestones, Risks
- Expand Project Scope Specification, down to Work Packages and Tasks
- Prepare Risk Mitigation Plan
- Establish structures for Planning and Budgeting (CBS, WBS, OBS, Cost Accounts)
- Prepare Schedule
- Prepare Resource Plan
- Prepare Budget
- Establish Baseline

#### **System Support Requirements in the Inception Phase:**

- Risk Management
- Database with multiple hierarchical coding structures
- Scheduling\*
- Resource Planning\*
- Budgeting\*

\*The last three items must be able to support variable time distribution structures

### ***Production (Execution or Implementation) Phase***

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Now your project is ready to go into the production phase. This is the part of the life cycle most commonly associated with “project control.” In this phase, you follow progress on the job, updating schedules and resource plans. You collect actual hours and

costs, and for Contract Projects, you generate revenue and create invoices. If you are using Earned Value techniques, you can convert the measured accomplishments to progress payment based billing.

**Activities in Production Phase:**

- Contract Administration
- Scope Control (avoid scope creep)
- Change Control (approved changes to scope with audit trail of effect on schedule and budget)
- Work Statusing
- Time Capture
- Cost Capture
- Replanning
- Monitoring and Performance Evaluation
- Progress Payments - Billing

**System Support Requirements in the Production Phase:**

*(In addition to items from earlier phases)*

- Time Reporting (by project coding structures)
- Invoice assignment by project coding structures
- Earned Value Analysis
- Invoicing (based on accomplishment – other)
- Multiple Baselines (for replanning)

***Closeout (Termination) Phase***

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This is the phase that we usually let get away. Everyone who has been on the project is either busy patting themselves on the back (for achieving project success), looking for new challenges, or running for cover (if the project has failed). In doing so, we lose a lot of valuable data and experience.

There is much to do to tidy up the loose ends, and to capture lessons learned and new technology and capabilities. A key benefit, from doing projects and managing them well through to closeout, is derived from technology transfer and the final project audit.

**Activities in Closeout Phase:**

- The Project Audit (This can also be performed at key stages during the project execution)
  - Why, What, When, Who
  - Current status of project
  - Forecasts
  - Status of key items

- Risk assessment
- Info pertinent to other projects
- Recommendations
- Post-Mortem (Evaluation)
  - Scope Accomplished
  - Technical Objectives Met
  - Recommendations for other projects
  - Project Historical Data
- Other Close-out Items
  - Final Measurements
  - Punch List
  - Uncompleted tasks
  - Special Closeout Tasks
  - Final Report
  - Client Acceptance
  - Assets Disposition
  - Personnel Disposition & Reports
  - Client Acceptance
  - Client Acceptance Documents
  - Client Feedback
  - Testimonials
  - Assets Disposition
  - Sell Residuals
  - Transfer Residuals
  - Toss Residuals
  - Document Transactions
  - Personnel Disposition & Reports
  - Arrange for transfer or reassignment of dedicated resources
  - Release assigned resources
  - Document performance
  - “Atta-boy/atta-girl” letters
  - Archives

## Using the Generic Project Life Cycle Model

If this model is applicable to your typical projects, then you might want to establish this model (edited to fit your specific situation) as a project template. It is much easier to start with a template than to start from scratch. In most instances, a blank sheet of paper leads to procrastination. Especially, when it comes to developing WBS's, it is hard to know where to begin. With the template, you have something that can be edited (deleting those items that don't apply to the specific project and adding unusual or unique items).

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Another advantage of using the template PLC is standardization and consistency from project to project. Having a common WBS allows collection and analysis of data across projects.

In conclusion, it makes a lot of sense to have multiple work breakdown structures. One of these structures should be based on the project life cycle.

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