What is Project Management?

- Project management is a methodical approach to planning and guiding a specific task, event or duty from start to finish.
- Project management typically involves a one-time project.
- Project management typically consists of 5 stages: initiation, planning, executing, controlling, and closing.
The 5 stages of Project Management

Stage 1: Initiation

The concept for a project will be carefully examined to determine if pursuing this project benefits the company. During this stage, a decision making team will identify if the project can realistically be completed and determine the risk/reward for the company.

- Review project charter
- Set initial project objectives and scope
- Define project scope
- Define project objectives
- Define project benefits
- Identify sources of business knowledge
- Prepare preliminary project timeline
- Determine preliminary project costs
- Establish business user participation
- Identify source of project funding - $ and people
- Decide whether to continue the project
- Scope planning
- Scope definition
Stage 2: Planning

A project plan and/or project scope may be put in writing, outlining the work to be performed. During this stage, a team should prioritize the project, calculate a budget and schedule and determine what resources are needed. This stage is completed by submitting a proposal for the project.

- Begin to prepare the project plan
- Review goals and objectives
- What strategies need to be considered
- Identify the specific activities
- Definition of each activity
- Sequencing of activities
- Estimate activity duration
- Develop schedule
- Develop risk management plan
- Determine resource needs
- Determine resource costs
- Allocate overall cost budget to individual resources
- Finalize the project plan

Stage 3: Executing

The project deliverable is developed and completed, adhering to the plan as developed in stage 2. Resource tasks are distributed and teams are informed of responsibilities. Tasks such as status meeting, project development updates and status reports will provide helpful information for stage 4.

- Perform the tasks and activities from the plan
- Evaluate overall performance to ensure quality standards are being met
- Develop individual and team skills to enhance project performance
- Distribute project information to stakeholders in a timely manner
Stage 4: Controlling

This Stage mostly deals with measuring the project performance and progression with respect to the project management plan. During this Stage, project managers may need to adjust schedules or do what is necessary to keep the project on track.

- Coordinate change control across the entire project
- Verify the scope
- Control changes to the project scope
- Control changes to the project schedule
- Control changes to the project budget
- Monitor specific project results to determine if they comply with relevant quality standards
- Disseminate performance information
- Monitor and control project risks

Stage 5: Closing

A project is formally closed in this stage. After project tasks are completed and the client has approved the outcome, an evaluation is necessary to highlight project success and/or learn from project history.

- Closeout all contracts
- Administrative closure – generate, gather, and disseminate all information to formalize project completion
- Document all lessons learned
- Document best practices
- Create file system for all project documentation
What is Workflow?

- Workflow is a series of tasks to produce a desired outcome, usually involving multiple participants.
- Workflow describes the sequential steps that comprise a work process in Project Management.
- Workflow includes the procedures, people and tools involved in each step of the Project Management process.
- Workflow can be sequential (each step contingent upon completion of the previous one) or parallel (multiple steps occurring simultaneously).

What do I get from Workflow

- A repeatable process that brings similar results each time.
- A clear division of responsibility between different people / departments.
- A better basis to estimate task length.
- A simple method to communicate processes to all employees.
How does this apply to Land Development?

Initiation

- Define project scope and objectives
- Define project benefits and risks
- Prepare preliminary timeline and cost
- Decide if you want to go after the project
Planning

Review goals and objectives

Identify the specific activities

Land Surveying
Engineering
Administrative

Estimate activity duration

Prepare project proposal

Executing

Land Surveying

Deed Research Title Report
Boundary & Topographic Survey (Field Work)
Boundary & Topographic Survey (Office)

Engineering

Concept Plan
Preliminary Design & Approval
Final Design & Approval
Bid Documents & Specifications

Administrative

Correspondents Letters/Transmittals
Coping, Printing & Scanning
Billing & Collections
Controlling

- Control changes to the project
  - Scope
  - Schedule
  - Budget
  - Monitor project results
  - Disseminate performance information

Closing

- Closeout the contract
  - Final documents
  - Final billing
  - Document lessons learned
    - What worked
    - What didn’t work or needs improvement
  - Document best practices
Gantt Chart

- Developed by Henry Gantt in 1910, as a way to visualize a project's start and end date along each task that needs to be completed.

Gantt Chart – Pros

- Allows for efficient organization – In order for a Gantt chart to be successful, you first need to identify project tasks. If you are using this type of chart you are essentially forced to focus on what truly needs to be done, thus making you somewhat more organized and encouraging a potentially higher chance of success.
- Helps establish timeframes – Because many project elements often depend on other tasks, it can be tough to deduce how long one task should take and when to start and finish it by. Gantt charts use bars to indicate how long a task should take and give you a better perspective of the total project, and timeframe as a whole.
- Highly visual – Gantt charts are visual, and give you an excellent way to instantly see and comprehend all of the different elements in one place, thus bringing thoughts and ideas together. Beyond that, the visuals provide users with an easy to see chart of what needs to be done next.
Gantt Chart - Cons

- Potentially overly complex – If you’ve ever worked on a complex project, and looked at the Gantt chart, you know that these charts can be large and hard to read.
- Need to be updated – Gantt charts are developed early in the planning stages of a project, there is a good chance that the project will change, thus the chart will need to be updated. Also, as tasks are completed or reviewed the chart will need to be updated to reflect these changes too. Any amendments take time, especially if there are dependent tasks that need to also be revised.
- Don’t show the whole picture – Gantt charts show what tasks need to be done and the time they should take. They don’t show how much work each task will involve or how many people/resources each task will require. This can give some people an incomplete picture or the wrong idea about an individual task, which can cause issues as the project gets underway.

P.E.R.T. Chart

- Program Evaluation Review Technique – Developed by the U.S Navy in the 1950s to manage the Polaris submarine missile program.
- Presents a graphic illustration of a project as a network diagram consisting of numbered nodes representing milestones in a project linked by labeled vectors representing tasks.
P.E.R.T. Chart - Pros

- **Activity Analyses** - A project manager views information about the likely completion of a project on time and on budget by viewing PERT activities and events independently and in combination.
- **Department Coordination** - PERT analysis improves planning and decision-making by integrating and presenting data from multiple departments. Gathering qualitative and quantitative data from multiple sources also helps coordinate project activities and improves communication among departments.
- **What-if Analysis** - PERT requires that project activities be sequenced in a network under a set of rules specifying critical and sub-critical paths. The critical path is the longest sequence of activities and events -- milestones -- in the project, and determines the number of days required to completion. A what-if analysis identifies possibilities and uncertainties related to project activities.

P.E.R.T. Chart - Cons

- **Subjective Analysis** - The PERT method requires the identification of the activities of a new project and the arrangement of the activities in time sequence. As a result, the data collection and analysis process is subjective in nature, which can result in a PERT chart that does not accurately estimate time or cost.
- **Time Focus** - The PERT method is a time network analysis that determines labor, material and capital equipment requirements for individual project activities. Cost estimates are developed for each activity in the network. PERT is primarily a time-focused method. However the charts specify the time required to complete each project activity and the activities that must be completed to meet the project completion date.
- **Resource Intensive** - A PERT analysis requires a detailed study of project activities and comments from many people from different organizations. In addition, PERT is a complicated method that’s performed over an extended time. The labor-intensive nature of the PERT method makes PERT charts expensive to support.
Project Management Software

- Smartsheet
- LiquidPlanner
- Clarizen
- At Task
- Project Manager
- Basecamp
- EPM Live
- Redbooth
- Huddle

Keys to Success

- Plan your project.
- Know your costs.
- Review and adjust.
Beware of Scope Creep

The Balancing Act of Scope Creep

Just a small extra job... Not too much extra effort... I'm sure it won't take too long...

More Cost... More time... How do I make this project pay?