Scope and Schedule Management in Multiple Projects

Learning Objectives

- Familiarize upon processes involved in Project Scope and Schedule Management
- Understand the inputs necessary to determine the Project Context and Schedule
- Familiarize upon the tools and technique to monitor and control Project Scope and Project Schedule

Scope Management

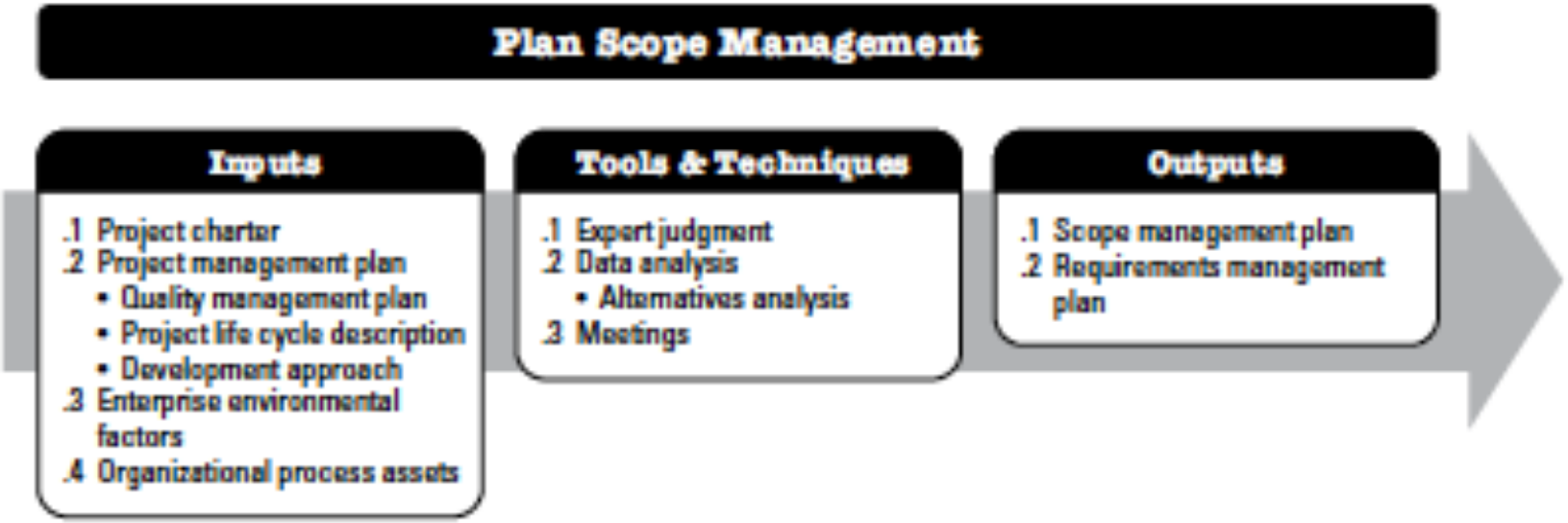
- It is the process of defining what work is required and then ensuring that all of that work is done
- The processes involved in scope management;
  - Plan Scope Management --- Done in Planning
  - Collect Requirements --- Done in Planning
  - Define Scope --- Done in Planning
  - Create WBS --- Done in Planning
  - Validate scope --- Done in M & C
  - Control Scope --- Done in M & C

Product and Project Scope

- Product scope are the product deliverables with their associated features and functions
  - Or these can also be defined as the requirements that relate to the product, service or result of the project
- Project scope is the work project team will do to deliver the product of the project; it encompasses the product scope and also includes meetings, reports etc
  - To determine the project scope has been successfully completed, the work accomplished is measured against the scope baseline

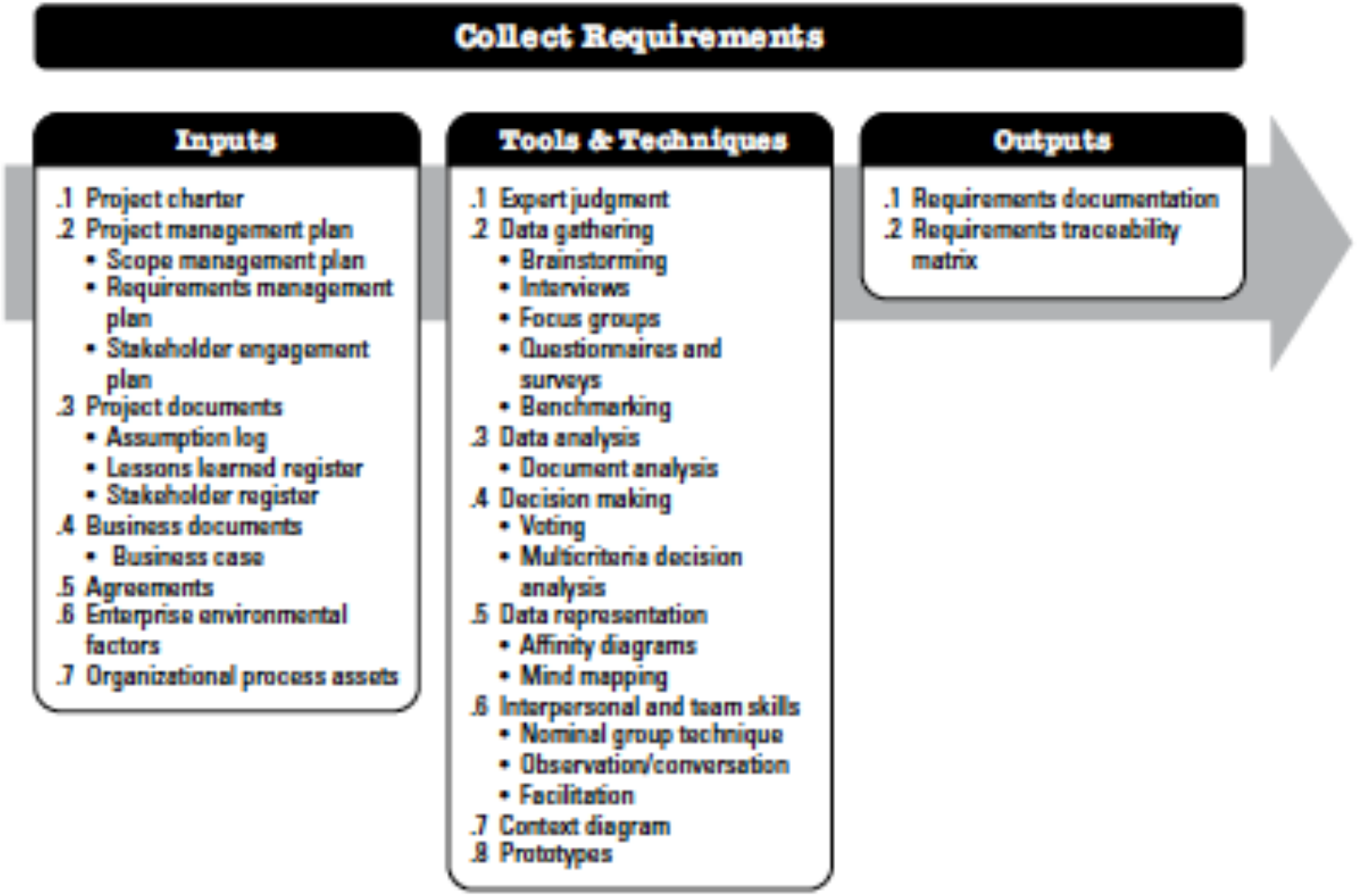
Plan Scope Management

- It provides guidance and direction on how scope will be managed throughout the project



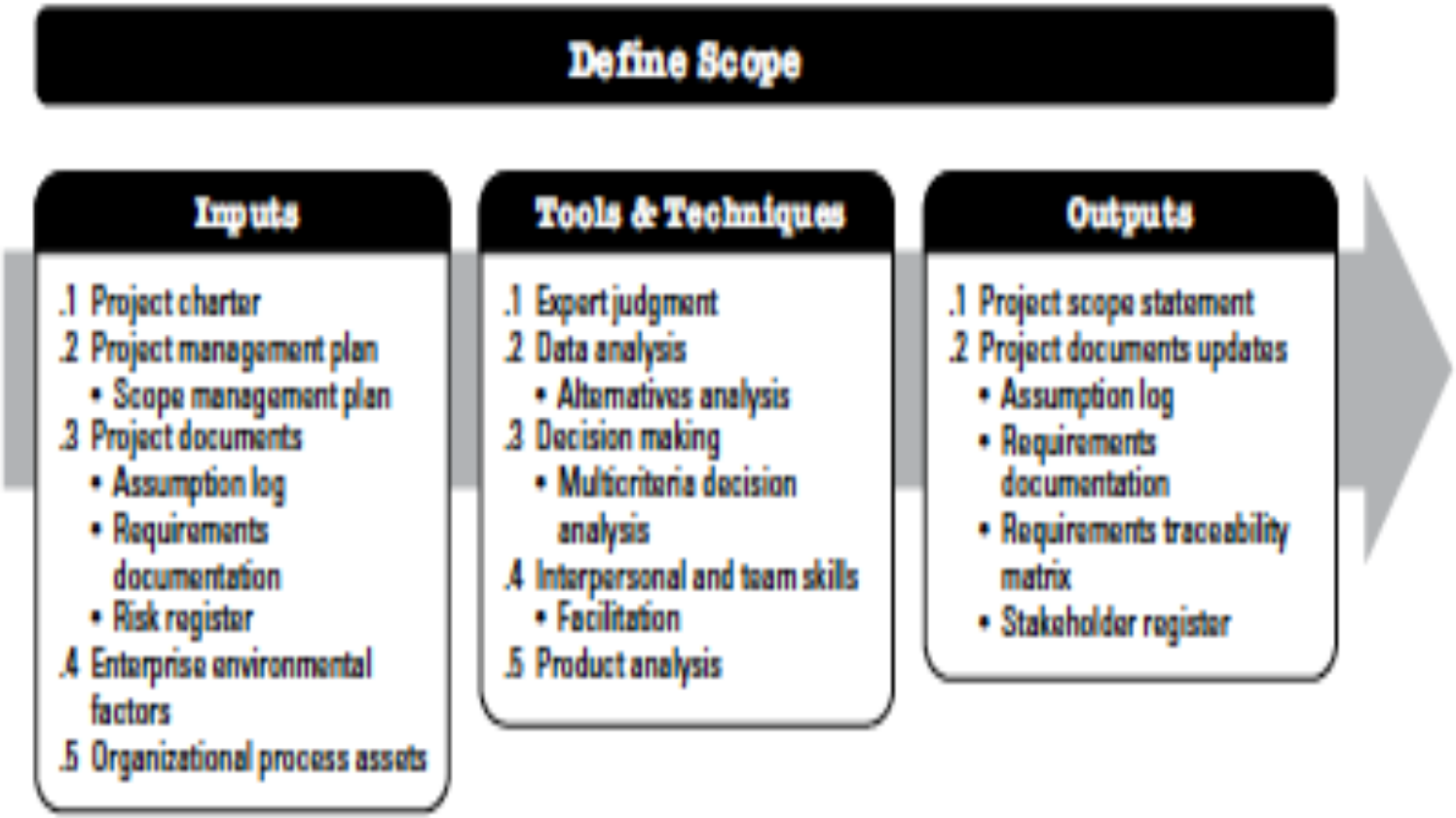
Collect Requirements

- It provides guidance the basis for defining the product scope and project scope



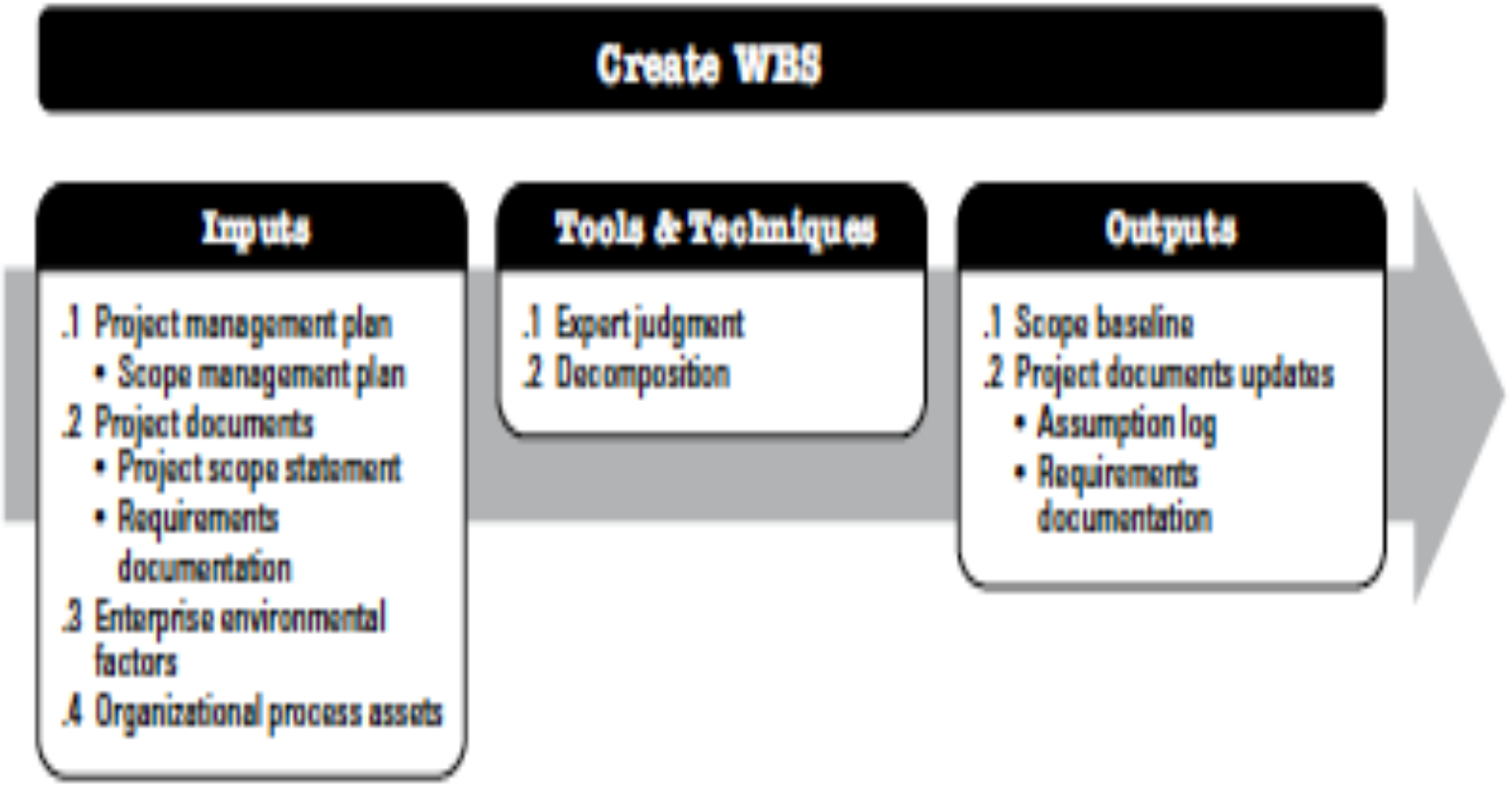
Define Scope

- It is process of developing a detailed description
- It describes the product, service, or result boundaries and acceptance criteria



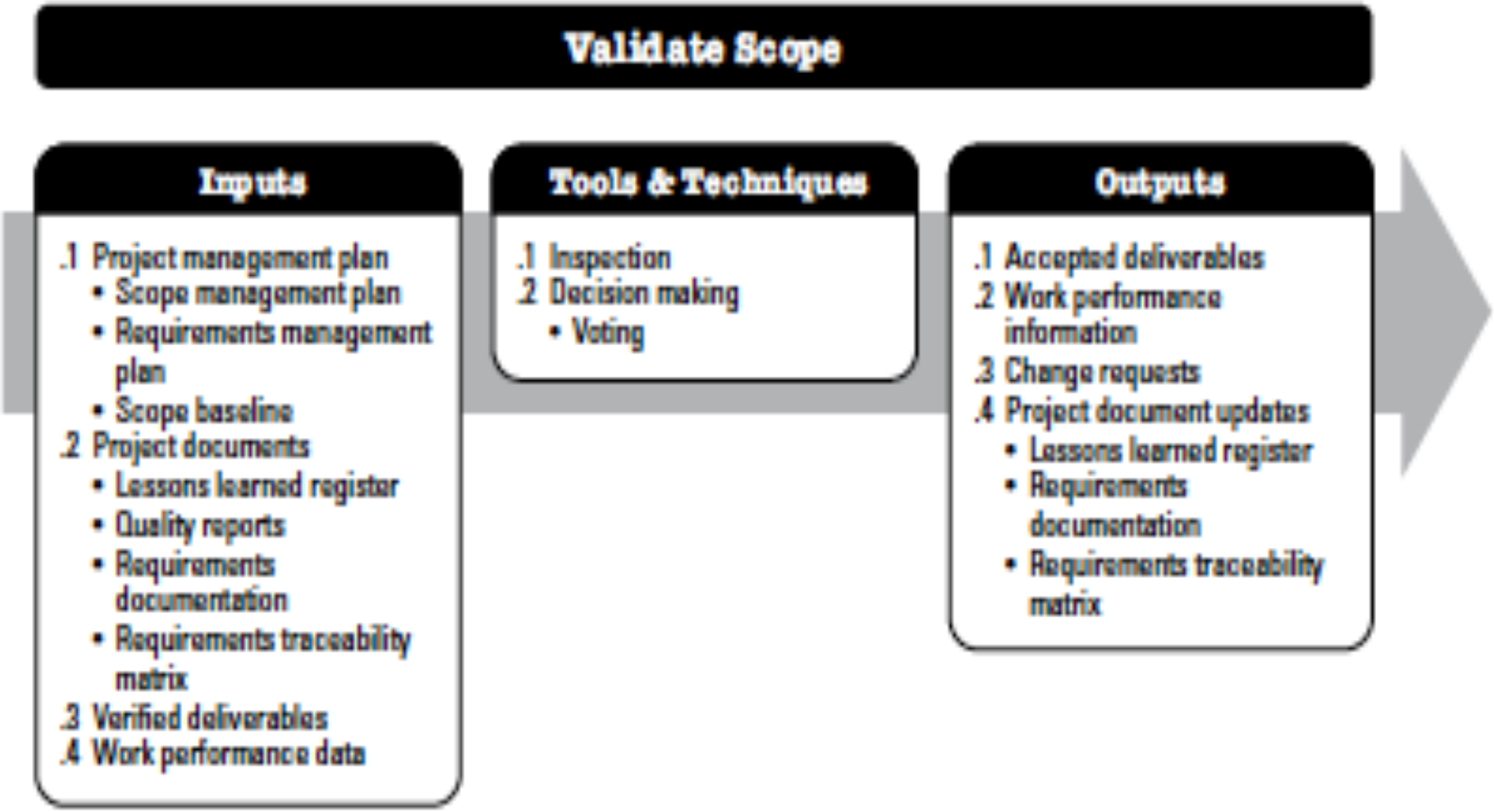
Create WBS

- A process of subdividing deliverables and work into smaller, more manageable components
- Provides a framework of what has to be delivered



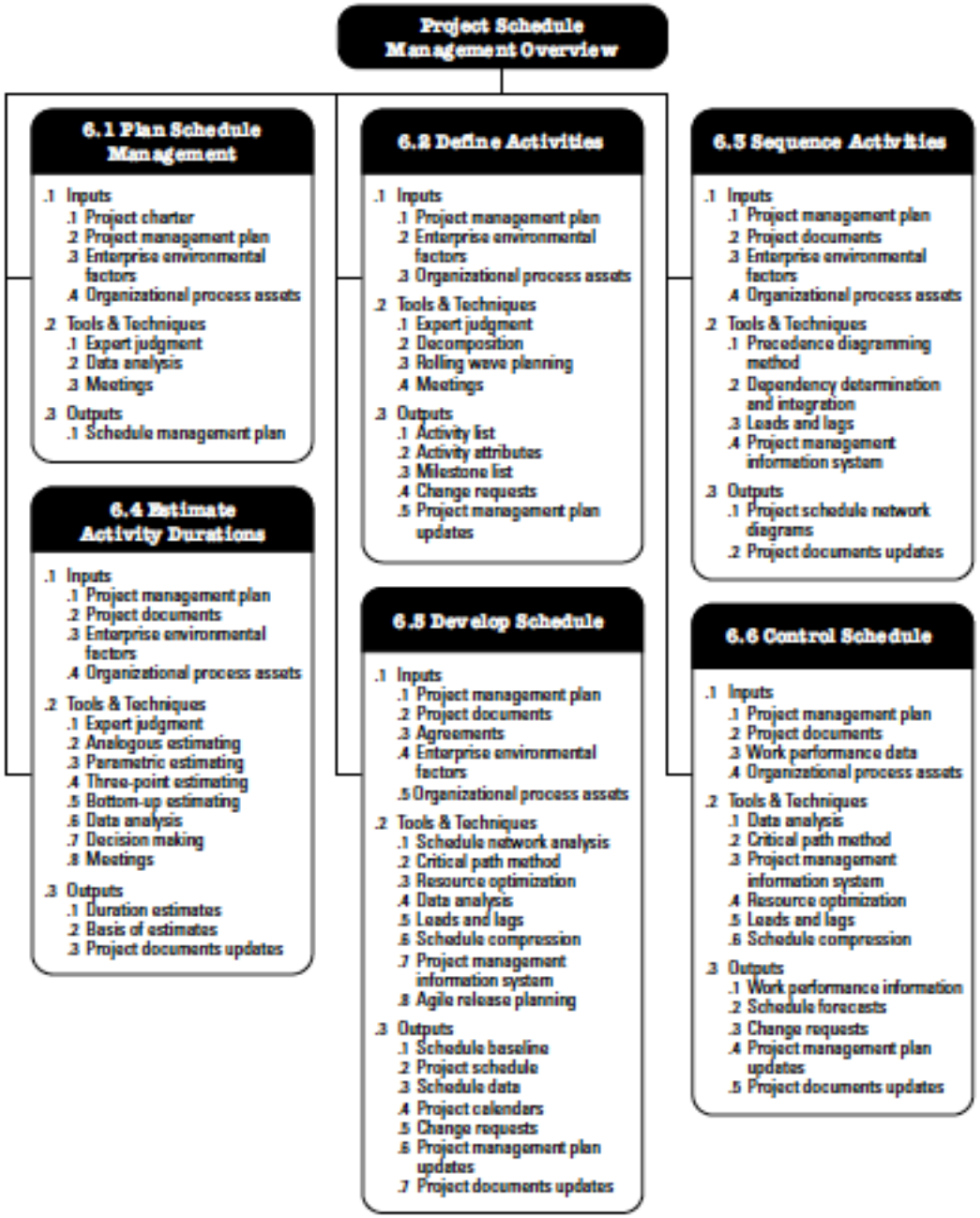
Validate Scope

- Process of formalizing acceptance of deliverables
- It brings objectivity to the acceptance process



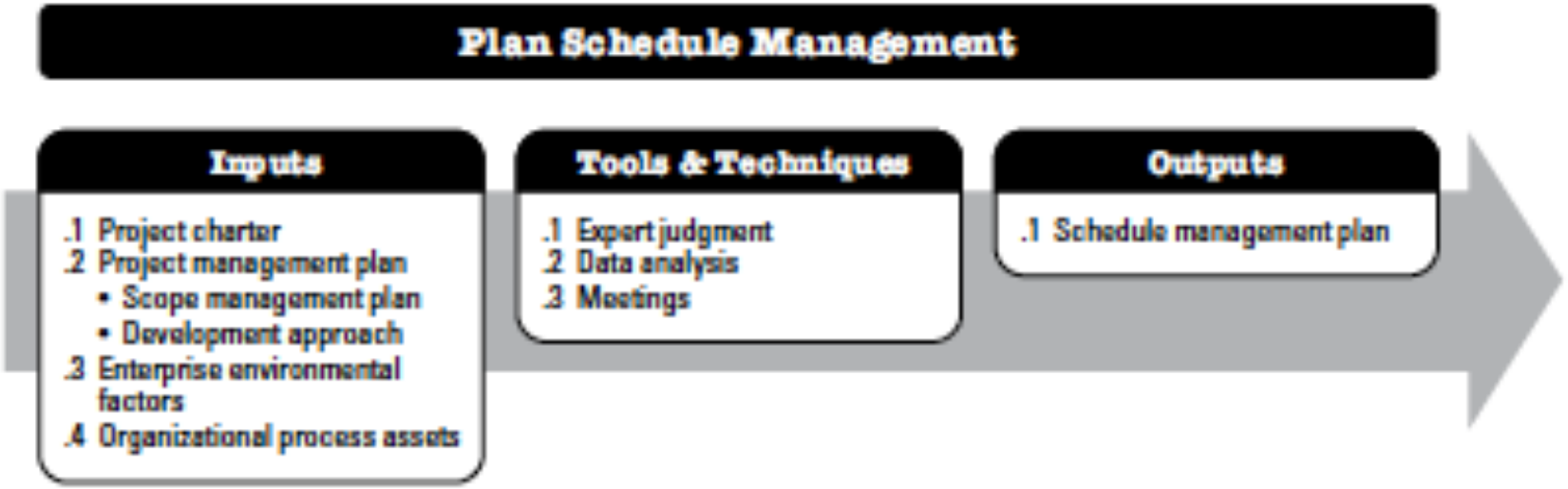
Project Schedule Management

- It includes following processes required to manage the timely completion of the Project
  - Plan Schedule Management : Policies, procedures and documentation for planning, developing, managing and controlling the project schedule
  - Define Activities: Process of identifying and documenting relationships among the project activities
  - Sequence activities
  - Estimate activity duration
  - Develop Schedule
  - Control Schedule


Project Schedule Management Overview
6.1 Plan Schedule Management
.1 Inputs
.1 Project charter
.2 Project management plan
.3 Enterprise environmental factors
.4 Organizational process assets
.2 Tools & Techniques
.1 Expert judgment
.2 Data analysis
.3 Meetings
.3 Outputs
.1 Schedule management plan
6.2 Define Activities
.1 Inputs
.1 Project management plan
.2 Enterprise environmental factors
.3 Organizational process assets
.2 Tools & Techniques
.1 Expert judgment
.2 Decomposition
.3 Rolling wave planning
.4 Meetings
.3 Outputs
.1 Activity list
.2 Activity attributes
.3 Milestone list
.4 Change requests
.5 Project management plan updates
6.3 Sequence Activities
.1 Inputs
.1 Project management plan
.2 Project documents
.3 Enterprise environmental factors
.4 Organizational process assets
.2 Tools & Techniques
.1 Precedence diagramming method
.2 Dependency determination and integration
.3 Leads and lags
.4 Project management information system
.3 Outputs
.1 Project schedule network diagrams
.2 Project documents updates
6.4 Estimate Activity Durations
.1 Inputs
.1 Project management plan
.2 Project documents
.3 Enterprise environmental factors
.4 Organizational process assets
.2 Tools & Techniques
.1 Expert judgment
.2 Analogous estimating
.3 Parametric estimating
.4 Three-point estimating
.5 Bottom-up estimating
.6 Data analysis
.7 Decision making
.8 Meetings
.3 Outputs
.1 Duration estimates
.2 Basis of estimates
.3 Project documents updates
6.5 Develop Schedule
.1 Inputs
.1 Project management plan
.2 Project documents
.3 Agreements
.4 Enterprise environmental factors
.5 Organizational process assets
.2 Tools & Techniques
.1 Schedule network analysis
.2 Critical path method
.3 Resource optimization
.4 Data analysis
.5 Leads and lags
.6 Schedule compression
.7 Project management information system
.8 Agile release planning
.3 Outputs
.1 Schedule baseline
.2 Project schedule
.3 Schedule data
.4 Project calendars
.5 Change requests
.6 Project management plan updates
.7 Project documents updates
6.6 Control Schedule
.1 Inputs
.1 Project management plan
.2 Project documents
.3 Work performance data
.4 Organizational process assets
.2 Tools & Techniques
.1 Data analysis
.2 Critical path method
.3 Project management information system
.4 Resource optimization
.5 Leads and lags
.6 Schedule compression
.3 Outputs
.1 Work performance information
.2 Schedule forecasts
.3 Change requests
.4 Project management plan updates
.5 Project documents updates

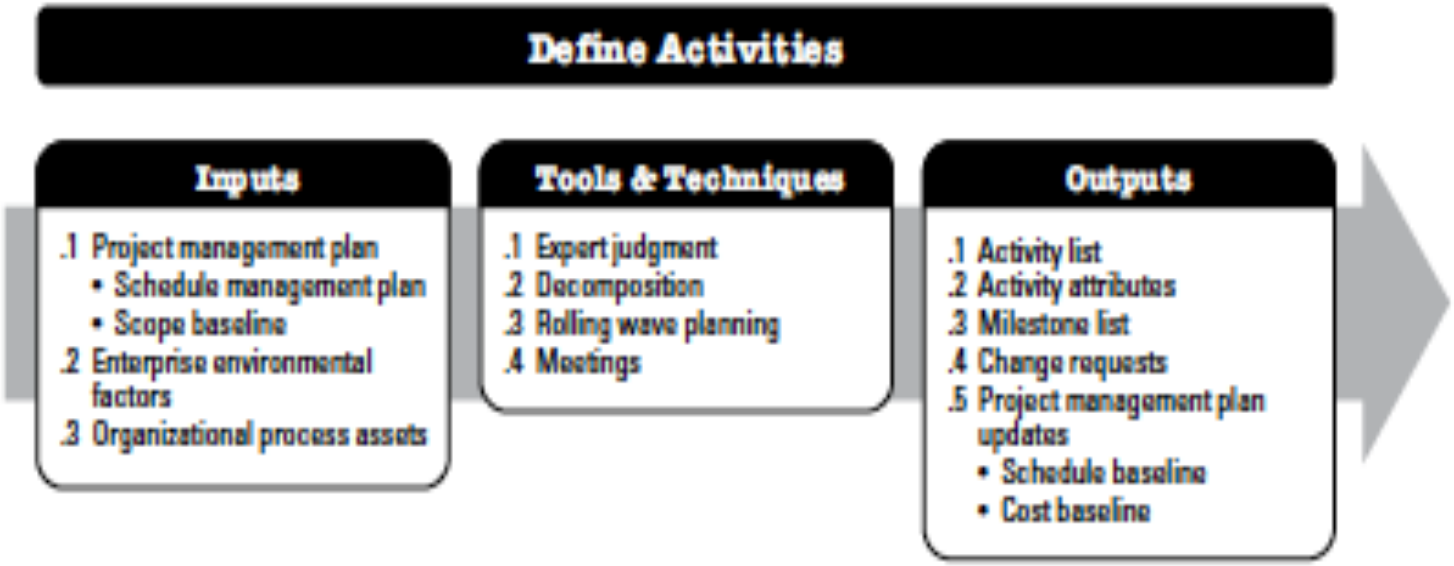
Plan Schedule Management

- It provides guidance and direction on how the project schedule will be managed throughout the project



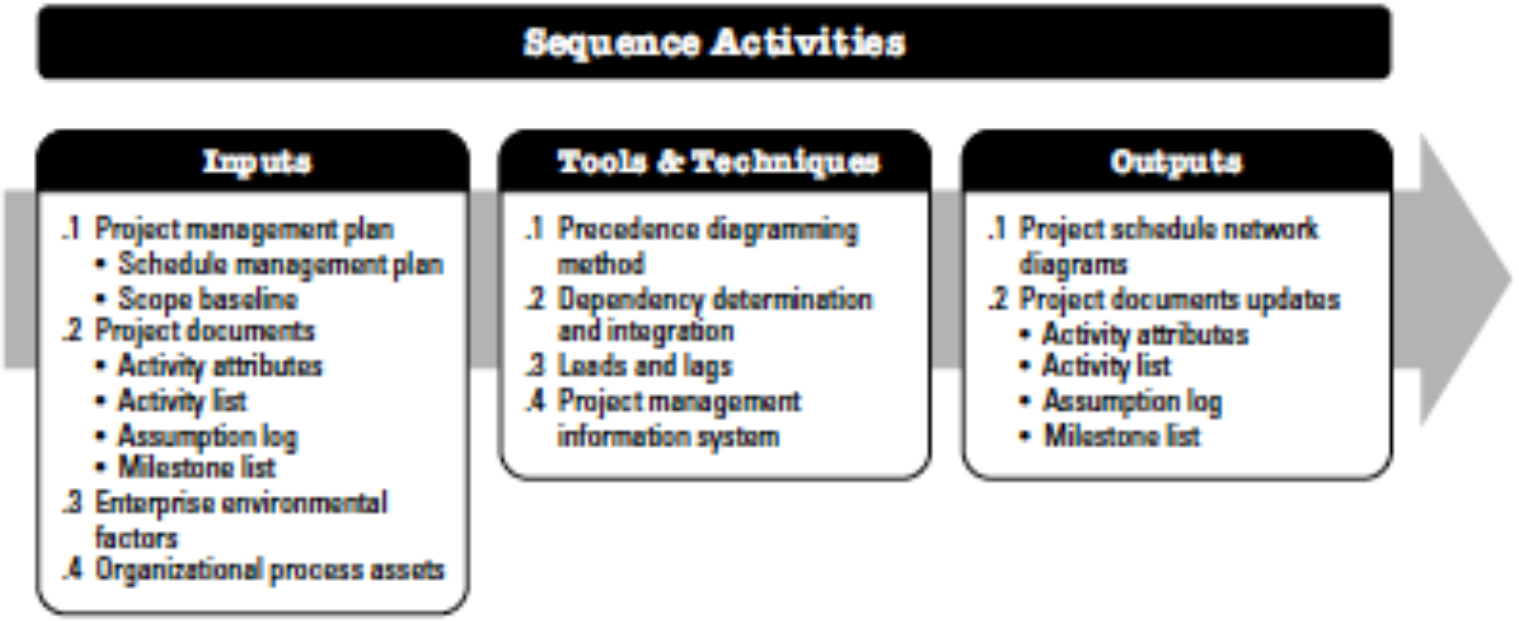
Define Activities

- It decomposes work packages into schedule activities that provide a basis for estimating, scheduling, executing, monitoring and controlling the project work

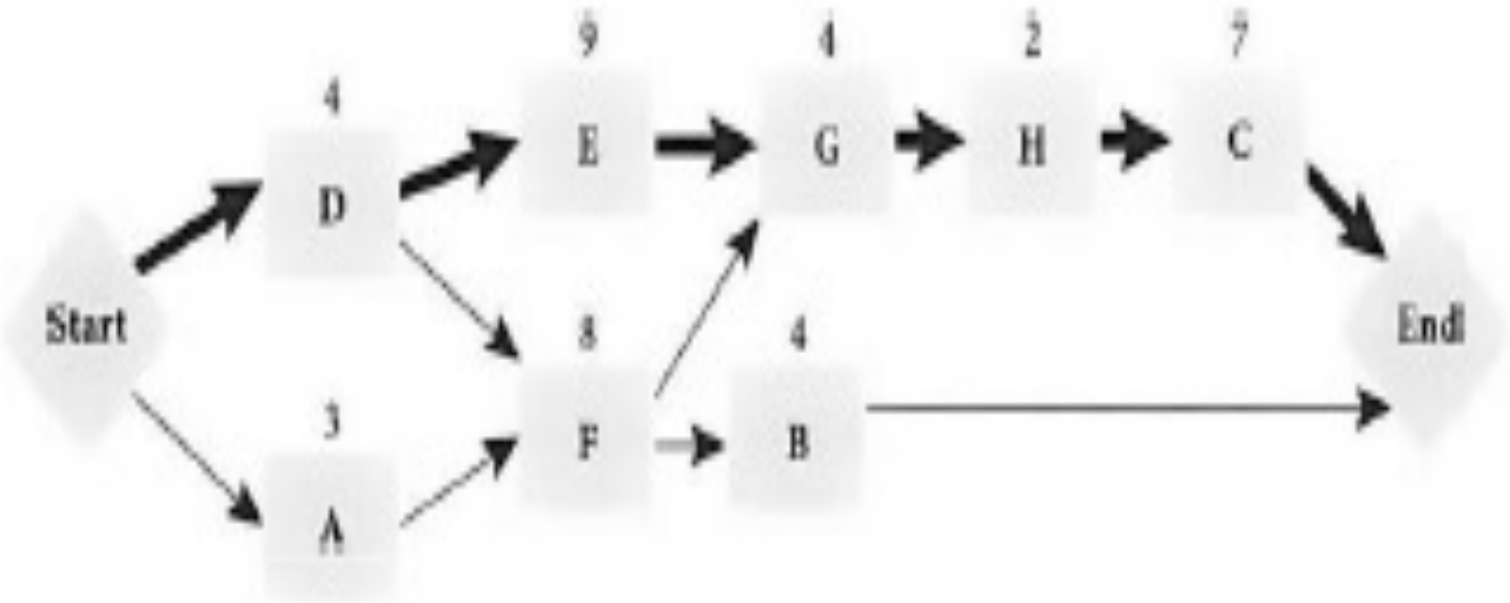


Sequence Activities

- It defines the logical sequence of work to obtain the greatest efficiency given all project constraints



Project Network Diagram



Forward Pass

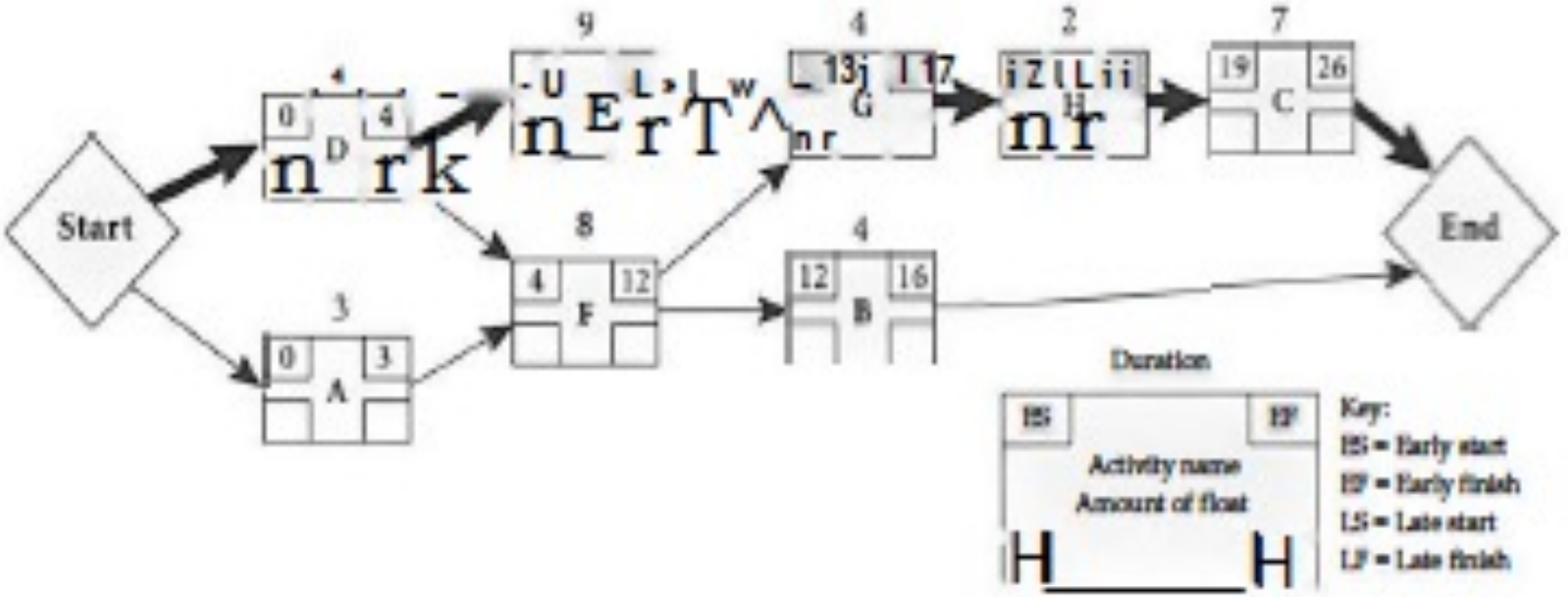
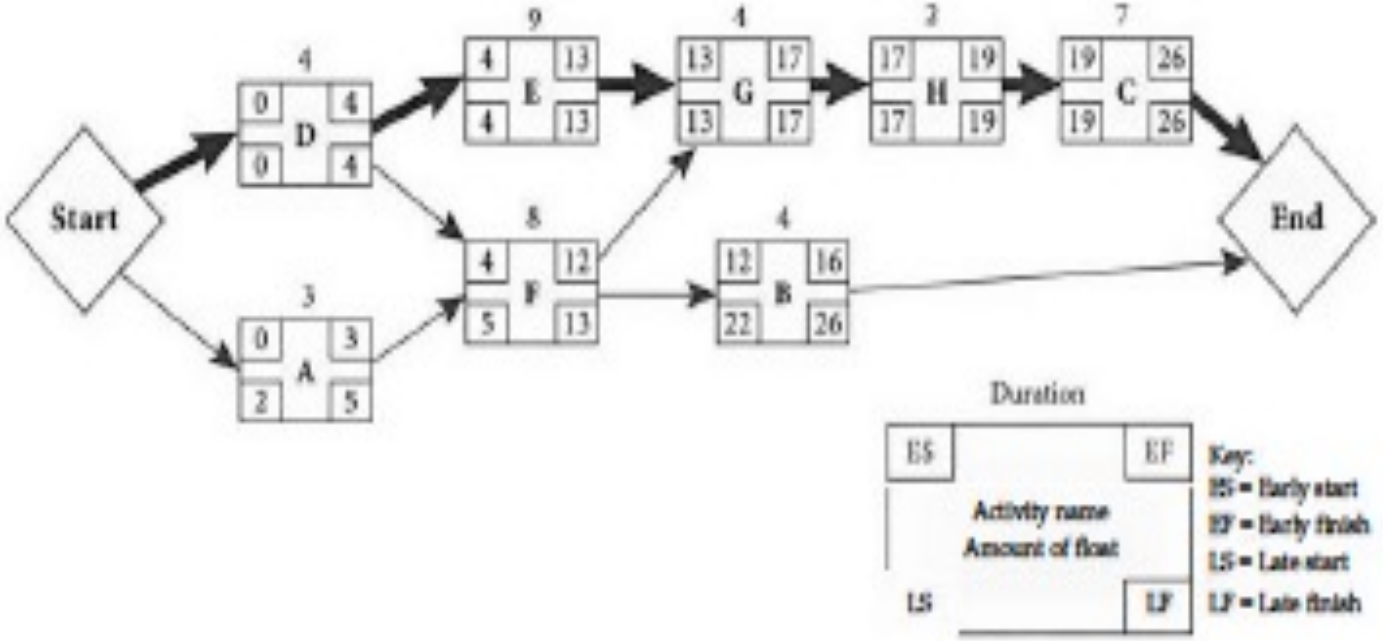


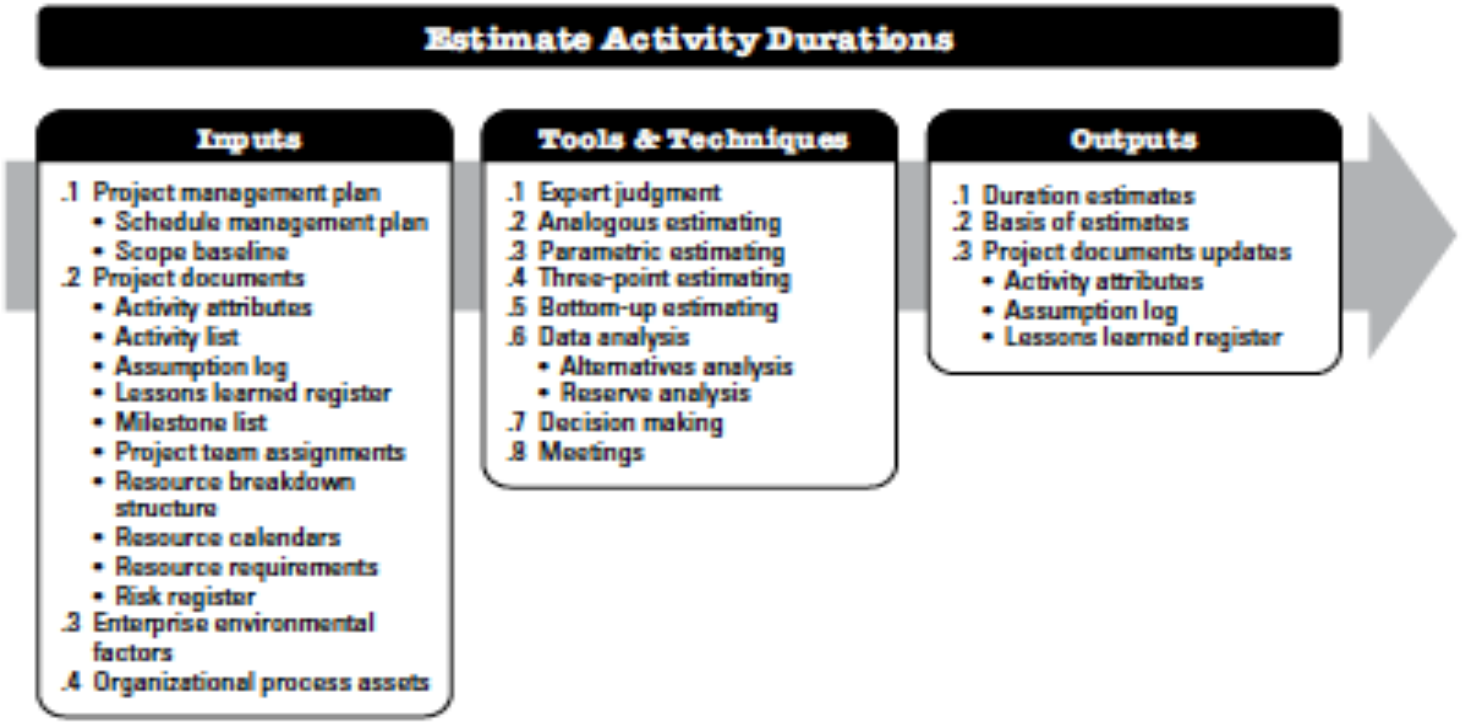
FIGURE 6.7 *Forward pass through network diagram*

Backward Pass



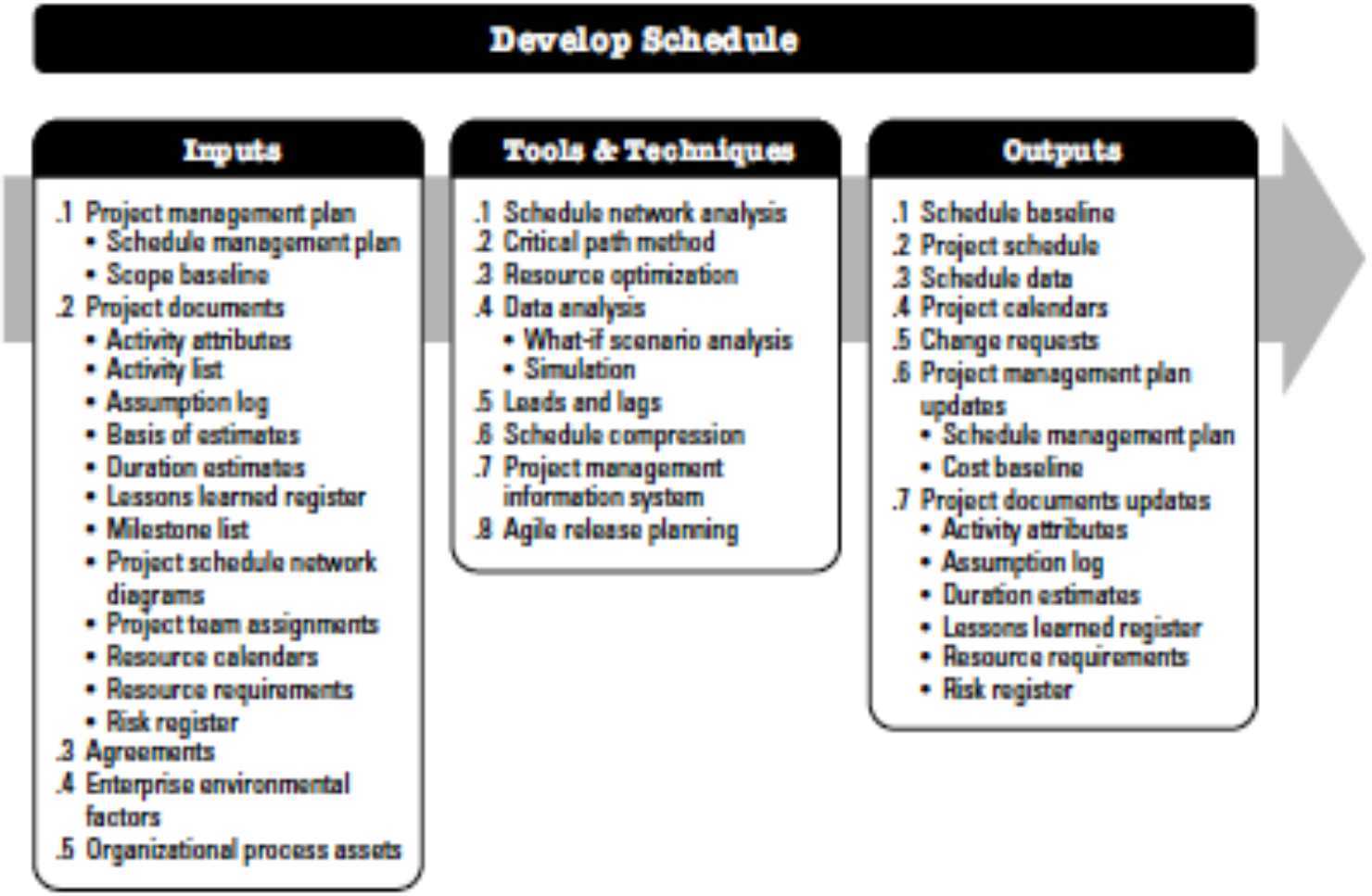
Estimate Activity Durations

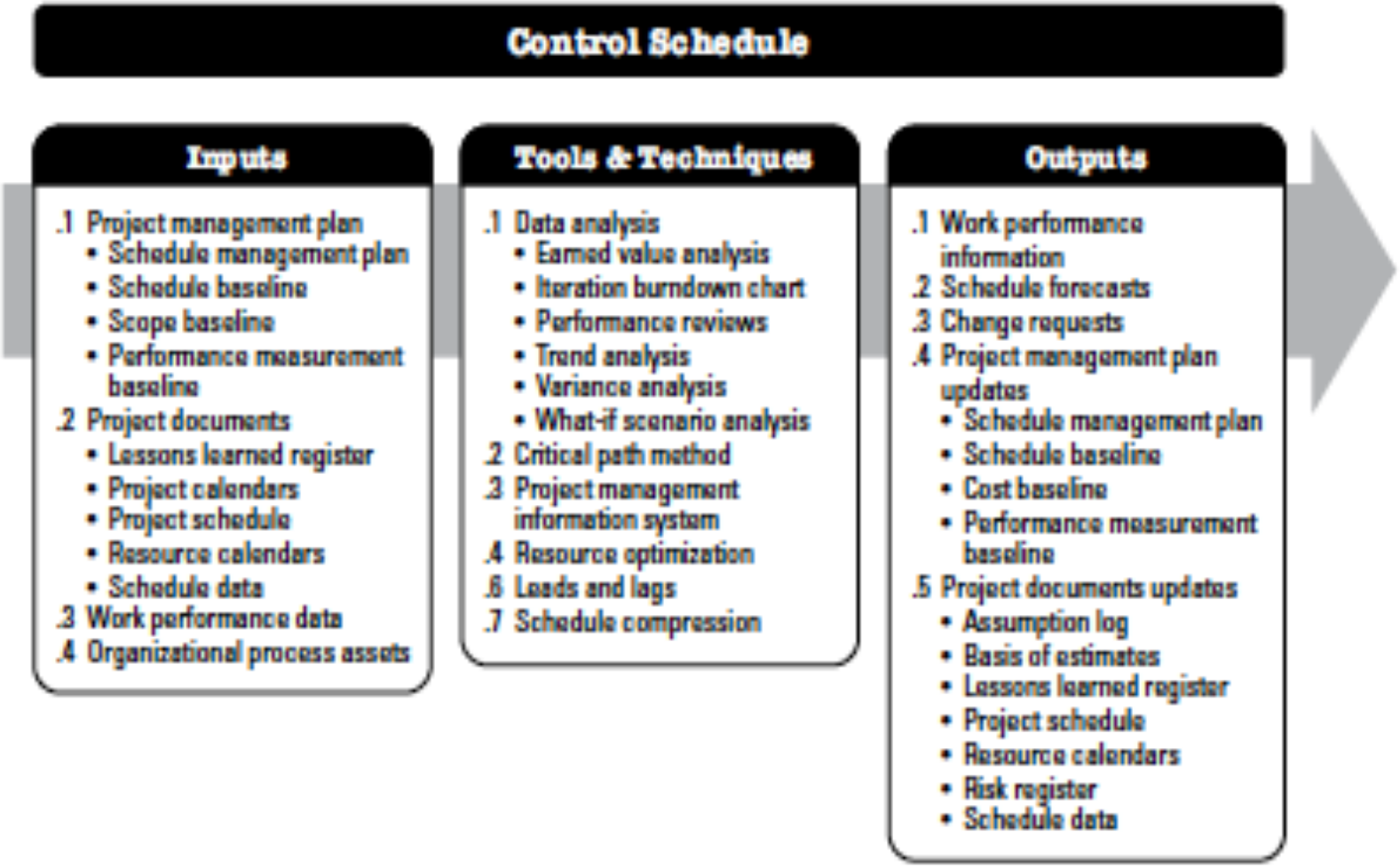
- It is performed throughout the project and provides amount of time each activity will take to complete



Develop Schedule

- It generates a schedule model with planned dates for completing project activities



Control Schedule

- It helps to maintain and control the schedule baseline throughout the project