

# Unit-I

# Process Models

# Prescriptive Process Models

1. Linear Water fall model
2. Parallel V-Model
3. Iterative Incremental Model
4. Evolutionary : Prototyping,  
concurrent Model,  
Spiral Model – win-win

# Perspective Process Models

## QUICK LOOK

**What is it?** A process model provides a specific roadmap for software engineering work. It defines the flow of all activities, actions and tasks, the degree of iteration, the work products, and the organization of the work that must be done.

**Who does it?** Software engineers and their managers adapt a process model to their needs and then follow it. In addition, the people who have requested the software have a role to play in the process of defining, building, and testing it.

**Why is it important?** Because process provides stability, control, and organization to an activity that can, if left uncontrolled, become quite chaotic. However, a modern software engineering approach must be “agile.” It must

demand only those activities, controls, and work products that are appropriate for the project team and the product that is to be produced.

**What are the steps?** The process model provides you with the “steps” you’ll need to perform disciplined software engineering work.

**What is the work product?** From the point of view of a software engineer, the work product is a customized description of the activities and tasks defined by the process.

**How do I ensure that I’ve done it right?**

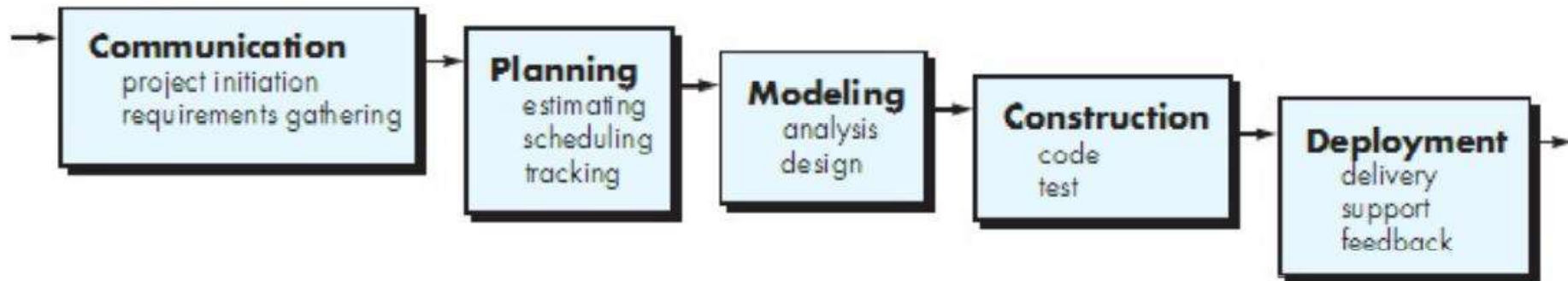
There are a number of software process assessment mechanisms that enable organizations to determine the “maturity” of their software process. However, the quality, timeliness, and long-term viability of the product you build are the best indicators of the efficacy of the process that you use.

# -Prescriptive Process Models

## Linear: Water Fall Model

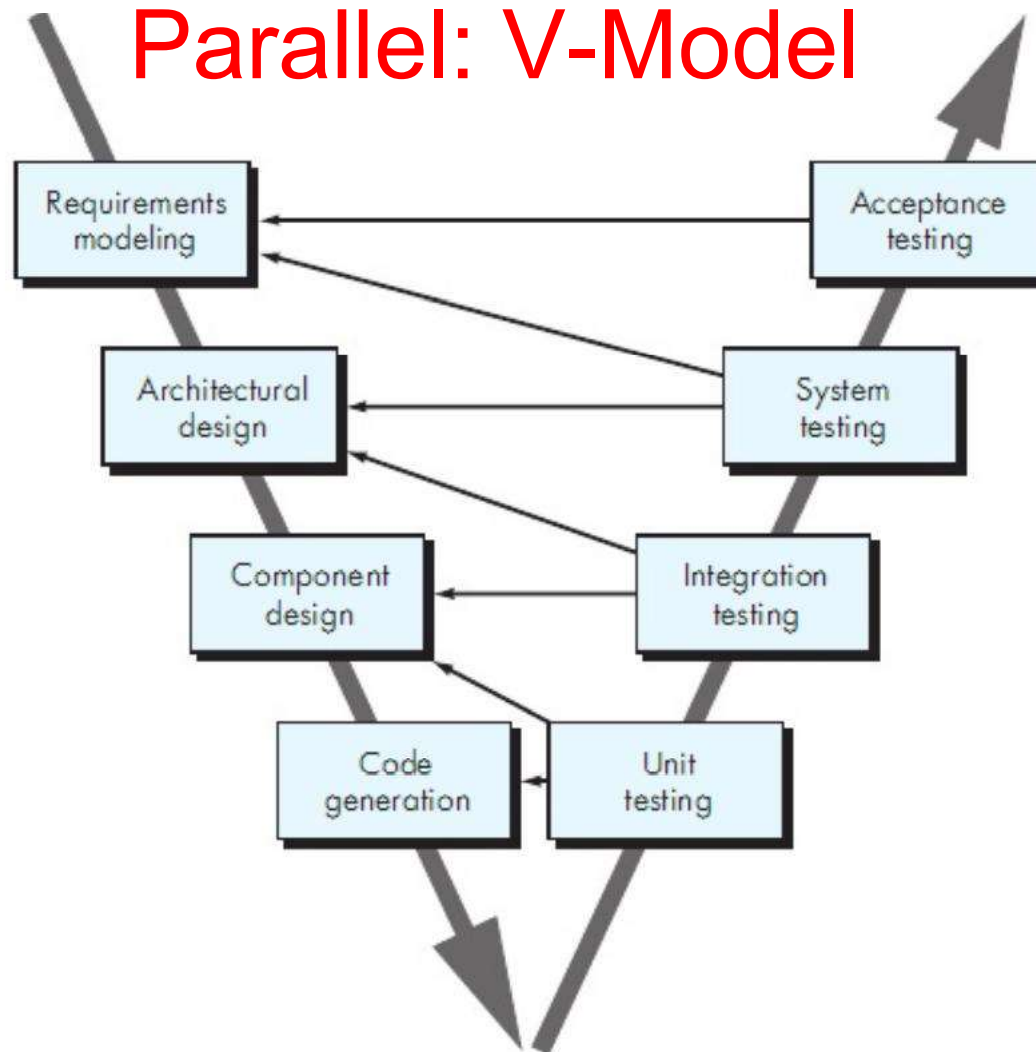
**FIGURE 4.1**

The waterfall model



# Perspective Process Models

The V-model

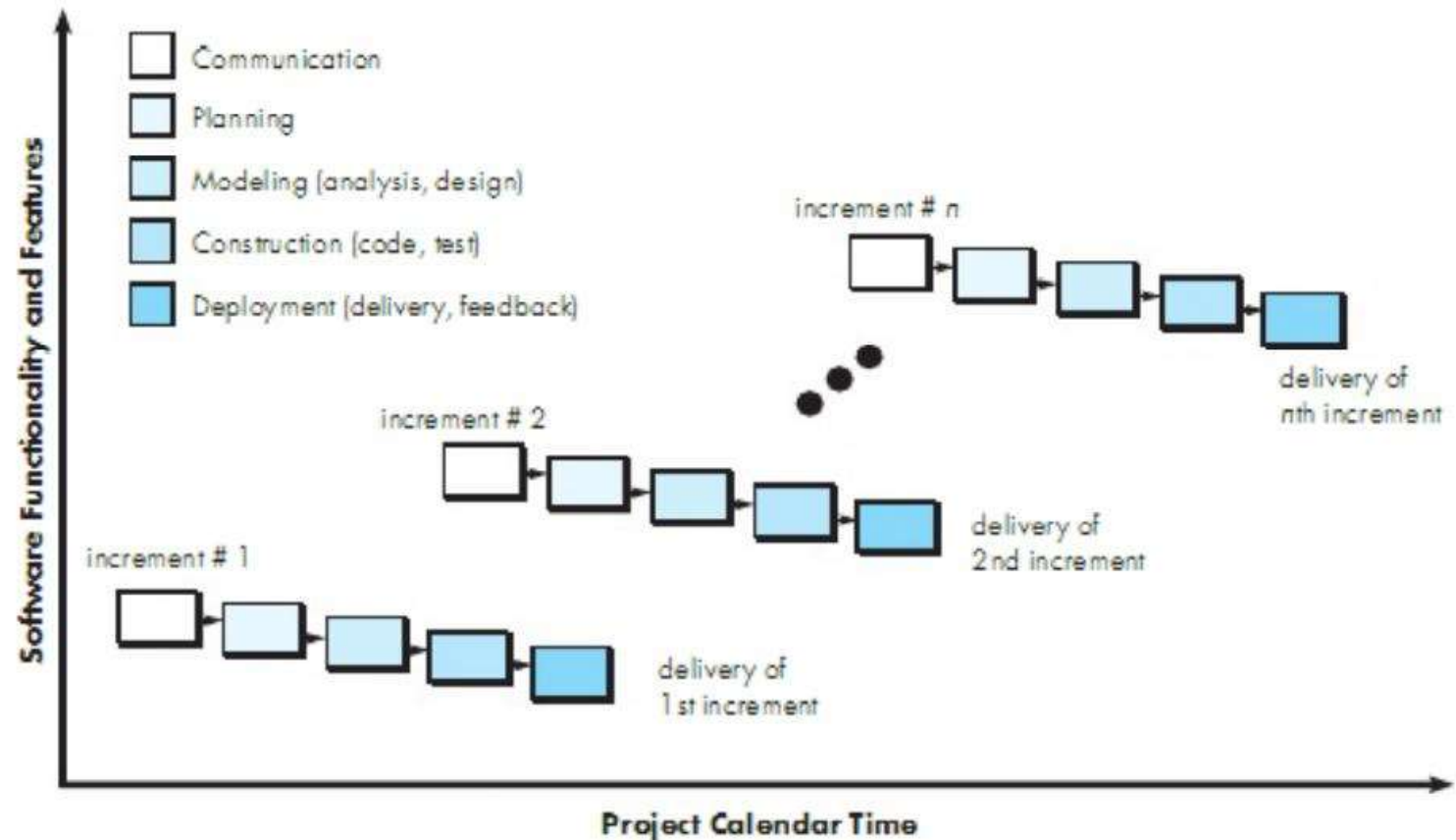


# Perspective Process Models

## Iterative: Incremental model

**FIGURE 4.3**

The incremental model



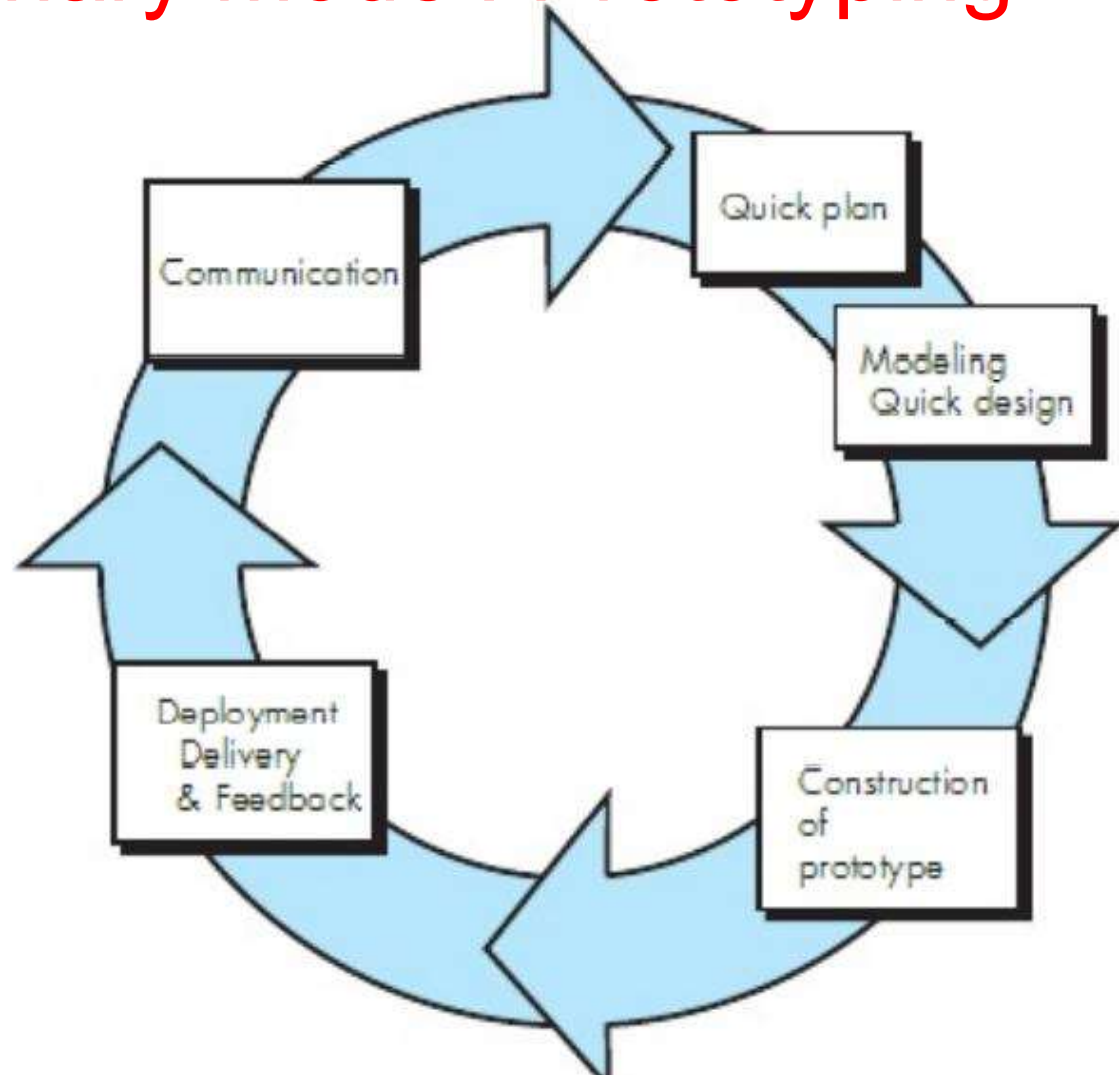


# Perspective Process Models

**FIGURE 4.4**

The prototyping paradigm

## Evolutionary model: Prototyping

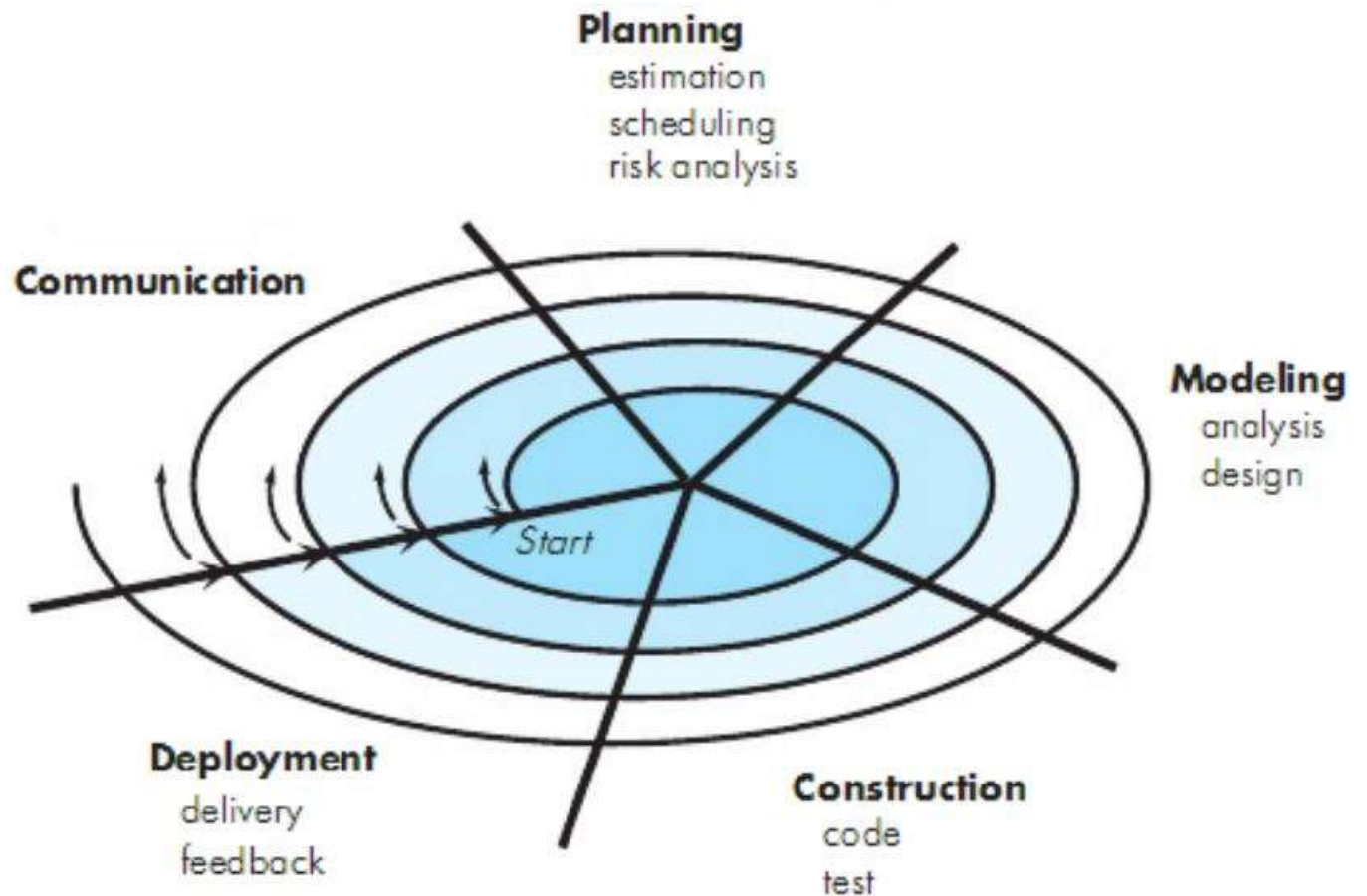


# Perspective Process Models

## Evolutionary Spiral model

**FIGURE 4.5**

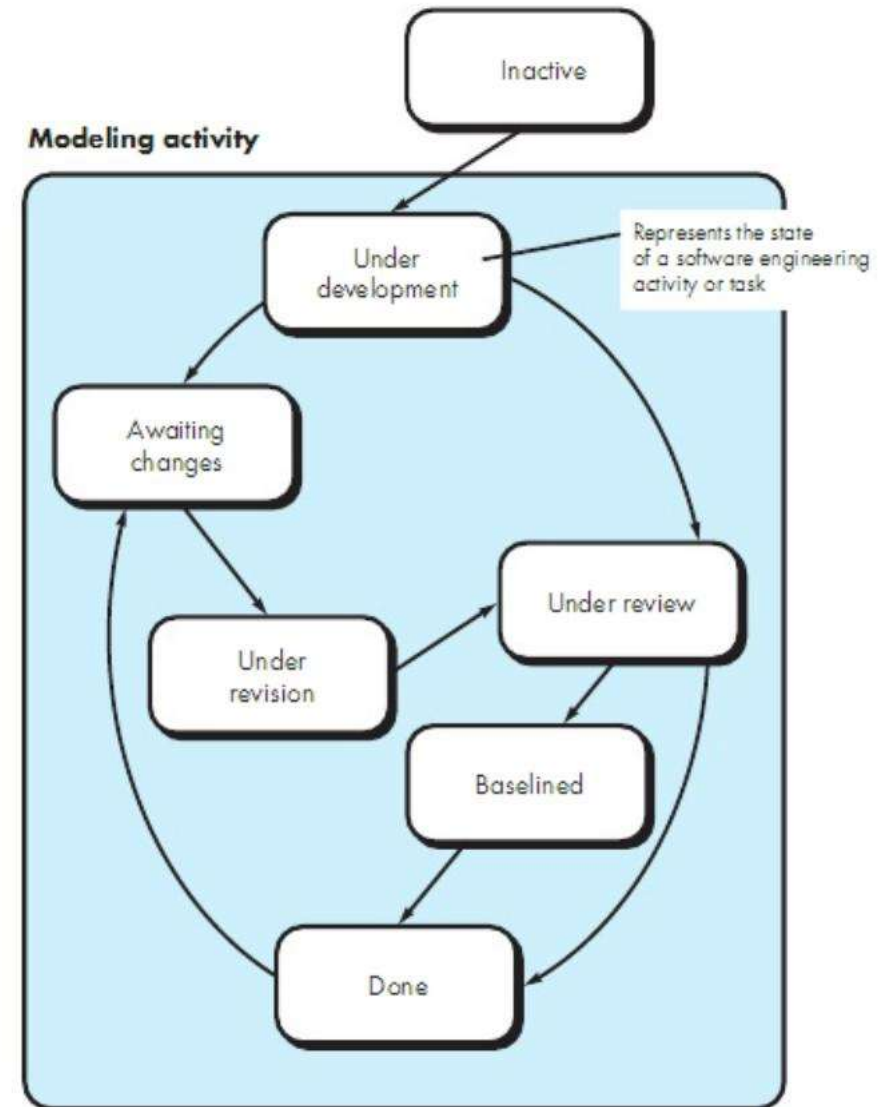
A typical  
spiral model





## Concurrent Process model

**FIGURE 4.8**  
One element of  
the concurrent  
process model



# THANK YOU