Control Techniques

Lecture 16

Control

- Steps in Controlling
  - Establish acceptable standards
  - Measure performance (Actual vs. Desired)
  - Identify gaps (Analyse Causes)
  - Correct deviations (Introduce and Implement)

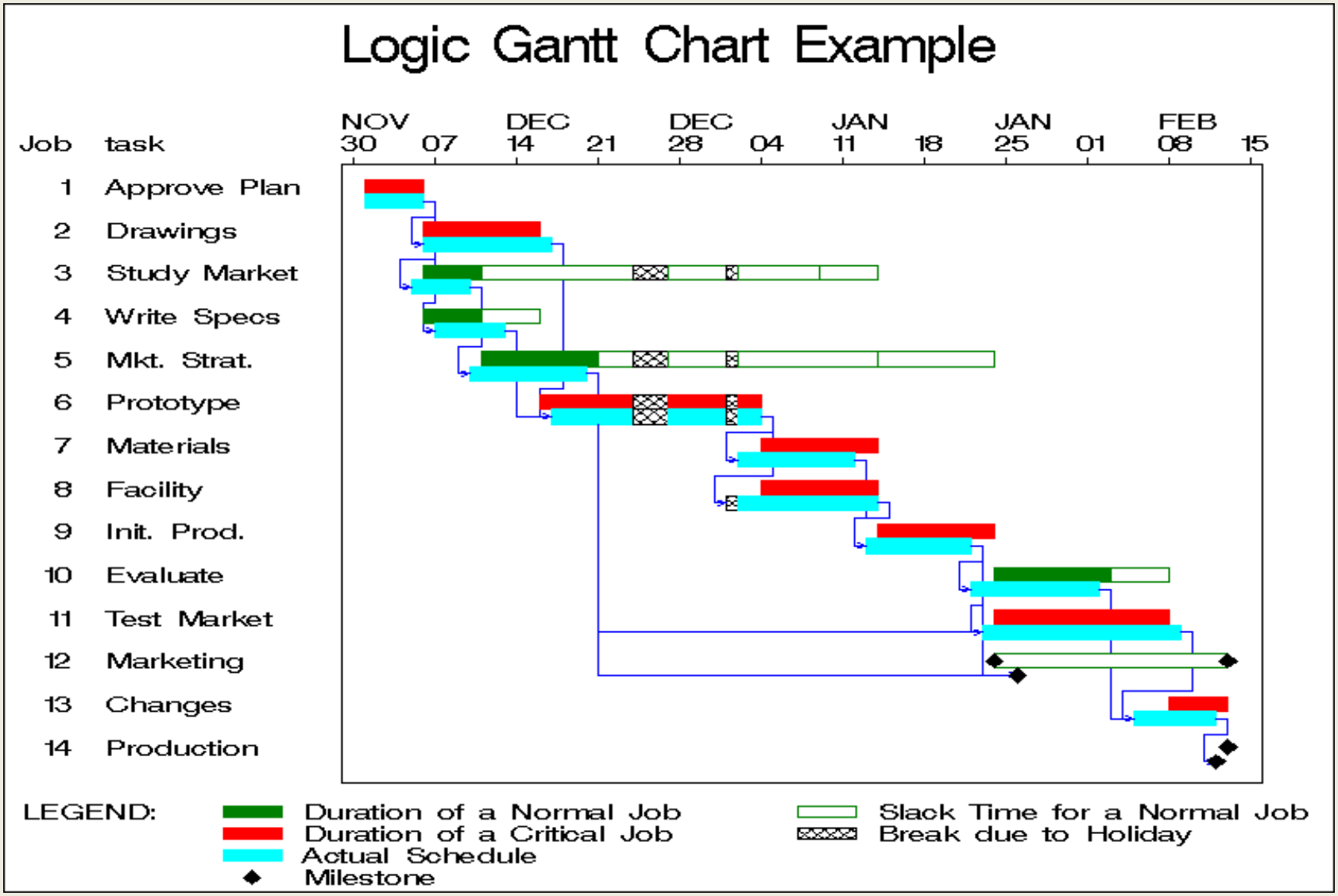
- Control is a continuous loop feedback system.

- Benchmarking performance – Setting goals based on common industry practices

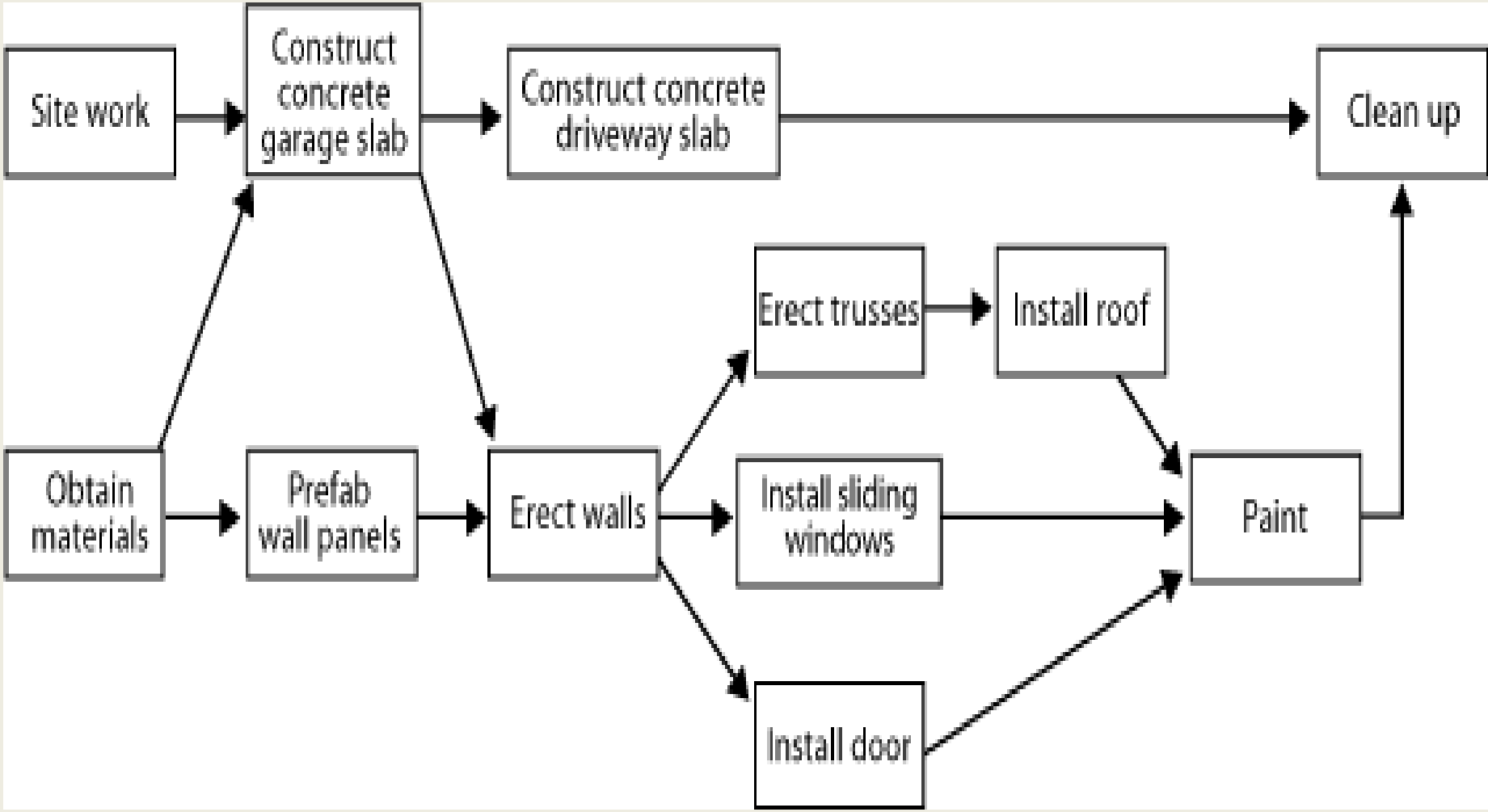
Control Techniques

- Budgeting – Formulating plans in numerical terms
- Zero-base Budgeting – Divides enterprise programs into packages and ground up budgeting is done based on goals to be achieved, resources needed, etc.
- PERT (time-event network analysis) – program is divided into various events--- each event has a time line for its occurrence.
- CPM – Within PERT the sequence of events that takes the longest time and nil slack time.
- Gantt Charts – Chart showing time relationships between ‘events’ of a production program
- Balance Scorecard (Financial, Customer and Stakeholder, Internal Process, Learning & Growth)
- Management Information System (MIS)

Representative Gantt Chart



Representative PERT Chart



Critical Path Method

- Same as PERT

- Steps to create CPM
  - Identify list of activities
  - Determine the sequence of their flow
  - Connect the activities (create a network flow)
  - For every activity assign time period for completion
  - Identify the longest duration path in the network - - this is the critical path
  - If the identified critical path gets delayed, the project will get delayed

Advantages and Disadvantages of PERT/CPM

Advantages

- Forces managers to plan in a chronological sequence
- Forces subordinates to plan
- Concentrates on critical elements that need correction
- Helps in feed-forward control (delay will impact succeeding events)
- Network of events fixes decision control rights

Disadvantages

- Reasonable guesstimates tough to make
- Not practical for recurring events (such as mass production)
- Emphasis on time, not on costs