

Critical Path

Business & Management

The longest path through a project, and why only it sets the deadline.

Critical path method, in outline.

1

List activities and durations

And what must precede what.

2

Draw the network

Activities as nodes, dependencies as arrows.

3

Forward pass

Earliest start and finish for every activity.

4

Backward pass

Latest start and finish without delaying the end.

5

Float = latest – earliest

Activities with zero float form the critical path.

IMPLICATIONS

Shortening a non-critical activity saves nothing

The critical path can move as the project progresses

Crashing costs money to shorten the critical path

There can be more than one critical path. Any of them delaying delays the whole project.