

Project Planning & Control

Lesson 6

Bar Charts for Resource Usage, Pros and Cons

Koshy Varghese, Ph.D.

Professor

Building Technology & Construction Management

Department of Civil Engineering

I.I.T. Madras





Gantt Chart – Resource Usage



Activity	Description	Duration (days)	Cost (Rs)
1	A	3	3000
2	B	3	6000
3	C	4	4000
4	D	5	2000
			15000



Step 2 - Enter Planned Cost Data



	Days									
Activity	1	2	3	4	5	6	7	8	9	10
A										
B										
C										
D										
Cost of Work Done (000's)	1	3	3	2	1	1.4	1.4	1.4	0.4	0.4
Cumulative Cost (000's)	1	4	7	9	10	11.4	12.8	14.2	14.6	15
Percentage (%)	6.6	26	45	60	67	77	86	95	97.5	100



Step 3 - Draw Cost-Completion Curve



Activity	Days										% Planned Cost	
	1	2	3	4	5	6	7	8	9	10		
A	■	■	■									
B		■	■	■								50-75%
C					■	■	■	■				75-100%
D						■	■	■	■	■	■	0-25%
Cost of Work Done (000's)	1	3	3	2	1	1.4	1.4	1.4	0.4	0.4		
Cumulative Cost (000's)	1	4	7	9	10	11.4	12.8	14.2	14.6	15		
Percentage Planned Cost	6.6	26	45	60	67	77	86	95	97.5	100		

What control information can be represented on the Gantt Chart?



PROS & CONS



PROS

- Intuitive Representation
- Communication to Any Level in the Organization
- Excellent Representation for Final Planning & Monitoring Information
- Ideal for projects that simple, sequential

CONS

- Dependencies Cannot be Represented – No Logic
- Limitation in Number of Activities Represented
- Cannot be Used as an Analytical Tool
- Can be very complex to prepare for large projects





Questions & Discussion