

TEAM EFFECTIVENESS

DIS INTEGRATION

NO AGREEMENT
BREAK DOWN OF
GROUP APPROACHES
GROUP REVERTS TO
A COLLECTION OF
INDIVIDUALS

BOUNDARIES
OF
EFFECTIVE
TEAM
WORK

INTEGRATION

TOTAL CONSENSUS
LEAD TO GROUP
THINKING
GROUP PROGRESS
PROVIDE FOCUS
RATHER THAN
TASKS IN HAND

EFFECTIVE MEETING

- CONFIRM THE PURPOSE OF THE MEETING
- DECIDE WHO SHOULD BE INVITED WITH MINIMUM REQUIREMENT OF INCLUDING ANY ONE WHO WOULD BE OFFENDED IF THEY WERE LEFT OUT.
- PRE-MEETING PREPARATION — LOCATION / TIMING / AGENDA
REPORT / BACKGROUND

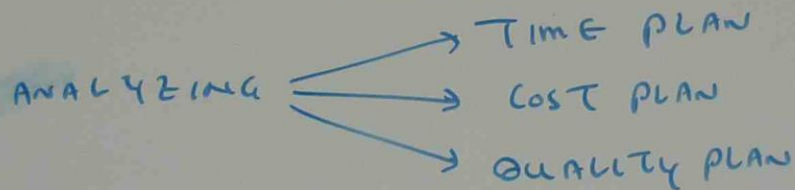
RUNNING THE MEETING - CONSTRUCTIVE DEBATE

DO NOT ALLOW REPETITION OF POINTS.

REGULARLY SUMMARISE PROGRESS. ASK FOR CONCLUSIONS.

PEOPLE ATTENTION DECLINE AFTER 20 MINUTES.

ANALYZING PLANS



RISK AND CONTINGENCY

STRATEGIC INVESTMENT DECISIONS.

CRASHING

HOW ALL OR PART OF THE PROJECT COULD

BE CARRIED OUT IN LESS TIME.

NUMBER OF WAYS TO SHORTEN THE ACTIVITIES

- PROVIDE THE INCENTIVE FOR THE WORK TO BE COMPLETED EARLY
 - ADD ADDITIONAL RESOURCES SUCH AS EXTRA PEOPLE (OR) MACHINE CAPACITY
 - PARALLEL ACTIVITIES - REDUCE THE RISK OF OVER RUN BY PROVIDING PARALLEL MEANS OF OBTAINING AN OUTPUT.
 - REDUCE THE LEVEL OF TECHNOLOGY - USE EXISTING TECHNOLOGY.
- CHANGE!

CHALLENGES

- PERSONAL SUPERVISION OF ONE (OR) MORE ACTIVITIES
- MEETING WITH PROJECT SPONSORS TO FIND THE TIME AT WHICH THE OUTPUT IS REQUIRED IN REALITY.
- DISCUSSIONS WITH PROJECT MEMBERS TO FIND AREAS THAT HAVE BEEN CONSERVATIVELY ESTIMATED AND THEREFORE PROVIDE SCOPE FOR SHORTENING.

CALCULATING MINIMUM COST SCHEDULE

NORMAL TIME (t_n)

NORMAL COST (C_n)

CRASHED TIME t_c - (THE SHORTEST POSSIBLE ACTIVITY CAN TAKE)

CRASHED COST C_c - (THE COST TO ACHIEVE THE SHORTEST POSSIBLE TIME)

$$\text{COST} \left| \begin{array}{l} \text{UNIT} \\ \text{TIME TO CRASH} \\ \text{EACH ACTIVITY} \end{array} \right. = \frac{C_c - C_n}{t_n - t_c}$$

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ACTIVITY	NORMAL TIME t_n (DAY)	NORMAL COST C_n	CRASHED TIME t_c (DAY)	CRASHED COST C_c	CRASHED COST PER DAY
A	5	300	3	600	$\frac{600 - 300}{5 - 3} = 150$
B	6	700	5	775	$\frac{775 - 700}{6 - 5} = 75$

ANALYZING COST PLAN

- THE SIZE OF THE PROJECT BEING CONSIDERED
- THE TIME SPAN OVER WHICH COST AND BENEFIT ARE GOING TO SPREAD

PAY BACK ANALYSIS

- PAY BACK ANALYSIS - CASH FLOW OF COST AND BENEFIT
- DISCOUNTED CASH FLOW - TIME VALUE OF CASH FLOW
- INTERNAL RATE OF RETURN - BASIC RETURN CRITERIA FOR TIME VALUE OF MONEY

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PAY BACK

- LIFE CYCLE COST OF ITEM
- TIME VALUE OF MONEY.

$$\text{PRESENT VALUE (PV)} = \frac{C_m}{(1+i)^m}$$

C_m = FUTURE VALUE OF INVESTMENT
m YEARS

i = DISCOUNTING RATE

$$\text{FUTURE VALUE} = C(1+i)^m$$

↑
PRESENT CAPITAL

$$\text{NET PRESENT VALUE (NPV)} = \text{PRESENT VALUE OF BENEFIT} - \text{PRESENT VALUE OF COSTS}$$

CONSIDERED

T AND BENEFIT ARE GOING TO SPREAD

OF COST AND BENEFIT

OF CASH FLOW

RETURN CRITERIA FOR

VALUE OF MONEY

ph IF A PROJECT REQUIRES THE EXPENDITURE OF \$100,000 NOW AND WILL YIELD \$200,000 IN SIX YEARS, HOW WILL THE MANAGER EVALUATE WHETHER OR NOT THIS IS VIABLE (10% DISCOUNT RATE)

$$\begin{aligned} \text{PRESENT VALUE (PV)} &= \frac{C_n}{(1+i)^n} \\ &= \frac{200,000}{(1+0.1)^6} = \frac{200,000}{(1.1)^6} \\ &= \$112,800 \end{aligned}$$

$$\begin{aligned} \text{NPV} &= \text{PRESENT VALUE OF BENEFIT} - \text{PRESENT VALUE OF COST} \\ \text{NET PRESENT VALUE} &= 112,800 - 100,000 \\ &= \$12,800 \end{aligned}$$

Now

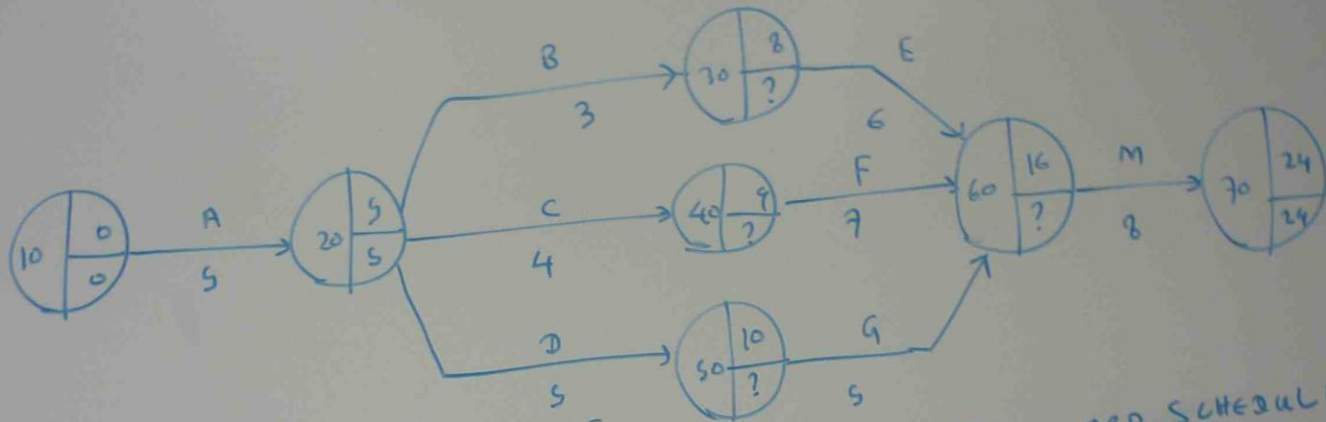
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G064+G070 REVIEW QUESTION

- ① How do you understand project management?
- ② What are the steps in development of project life cycle?
- ③ What are included in technical meaning of project management?
- ④ Sketch the overview diagram of project management.
- ⑤ Explain the strategy in project management with outline diagram.
- ⑥ What are the indicators of success and failure of project?
- ⑦ How will you begin the project planning?
- ⑧ Sketch the overview diagram of project planning.

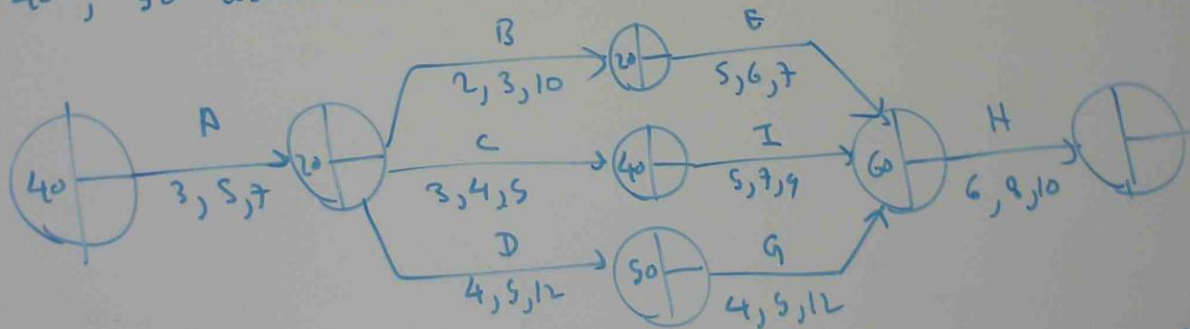
9) IF THERE ARE MANY STEPS AND ACTIVITIES IN THE PROJECT
 How will you manage to handle?

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FIND THE LATEST TIME FOR NODE
 30, 40, 50 USING THE GIVEN GANTT CHART FOR BACKWARD SCHEDULING

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DESCRIBE THE OPTIMISTIC TIME, MOST LIKELY TIME AND
 PESSIMISTIC TIME FOR ACTIVITIES A TO I AND CALCULATE
 THE EXPECTED TIME FOR THEM.

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