Networking Analysis Using Operations Research

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Abstract
Linear programming with two variables can be solved graphically. The graphical method of solving linear programming problem is of limited application in the business problem as the number of variable is substantially large. If the linear programming problem has larger number of variables the method for solving is simple method.
*Keyword: - Distance, Time, Balance graph.*

1- INTRODUCTION
Operation Research is special tool of network analysis and the field of contraction and fabrication and computer data analysis. Operation Research the main part of solution in network problem and network process and mathematics programming problem can be repletion by network related view such us shortest path and scan scheduling this paper of network analysis problem using Operation Research Related

2- NETWORK ANALYSIS USING OPERATION RESEARCH
The Operation Researches graphical Representation and logical connected activities in this paper. Network process is also called arrow diagram and the most application Technique
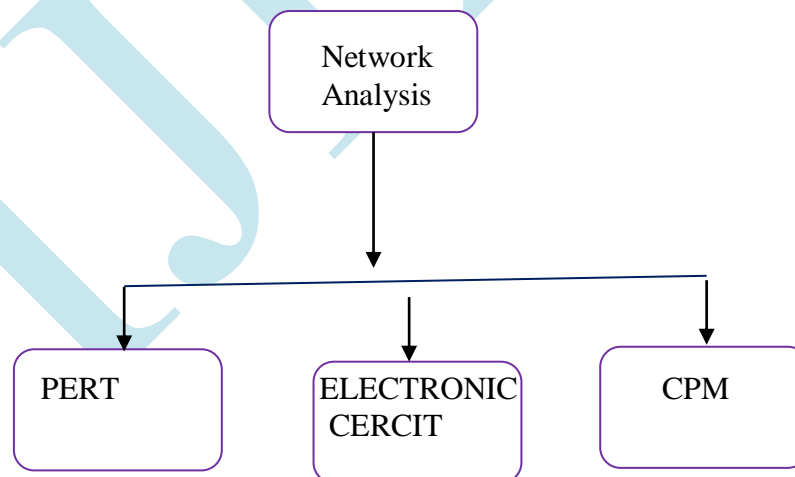
❖ PERT – this mothered apply in Operation Research the involved task is this paper the time to complete each and indentifying the minimum time to.

   The PERT based on the Operation Research an activity is direction follows a probability distribution instead of staring a single value these suppose there time estimates are required to compute the parameter of direction

   I.Adjective direction (T_a) – time the activity would take if things did not go well .

II. Most likely direction (T_m) – the consensus best estimate of the activity direction .

III. Optimistic direction (T_o) – the time activity would take if things did go well.
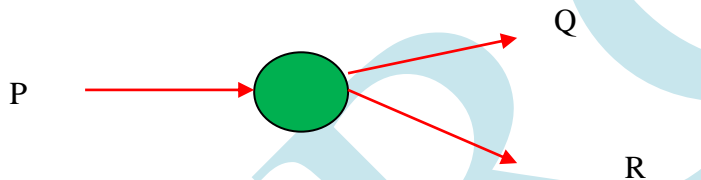
This operation

$$\text{Mean} = \frac{Ta - 4Tm + To}{6}$$

$$\text{Variance } (\sigma^2) = \left\{ \frac{Ta - To}{6} \right\}^2$$
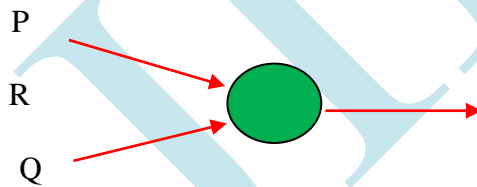
$$\mu = \frac{X - ʒ}{ ገ}$$

Where ʒ = mean of time

ገ = standard mean time

X = specified time
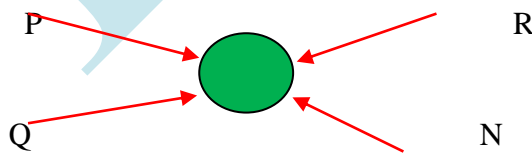
These paper situations in show network diagram.
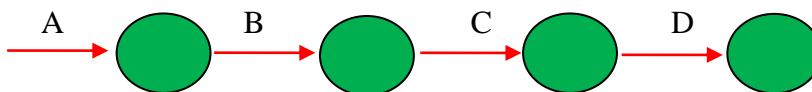
❖ P must finish before either Q or R can start.

❖ Both P and Q must finish before R can start

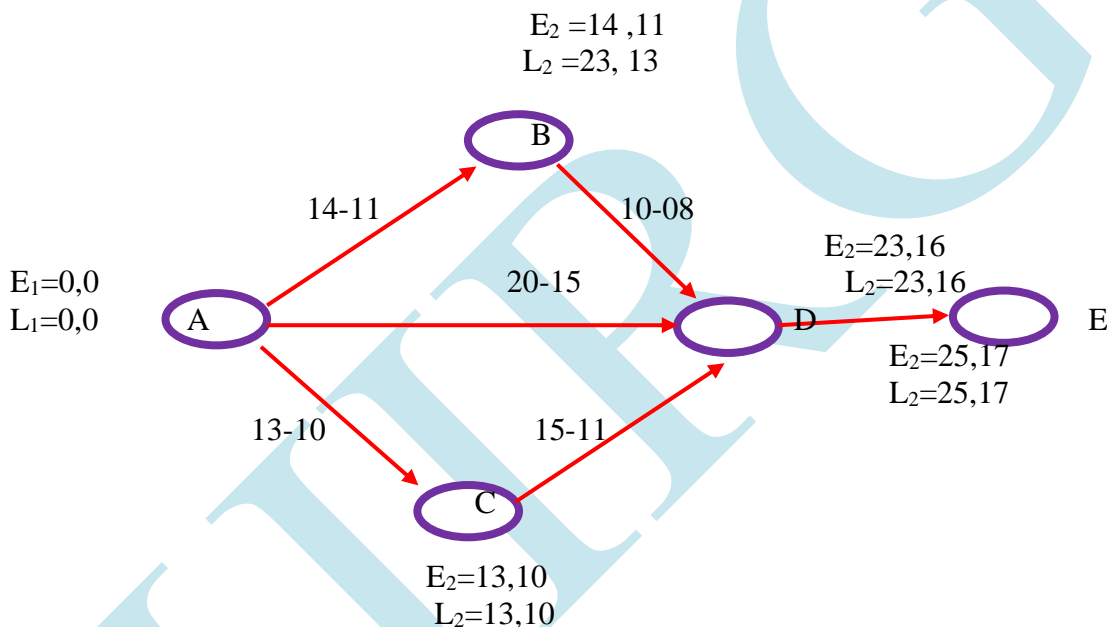❖ Both P and R must finish before either of Q or N start

❖ P must finish before Q can start both P and R must finish before N can start

The following table and other relevant information

Activities (p-q)	Duration	Crash duration in day	Case per day
A-B	14	11	25
A-C	13	10	30
A-D	20	15	35
B-D	10	8	15
C-E	15	11	20
D-E	07	6	45

- What is the length and minimum length!
- Finding minimum crashing cost
- What is the optimal schedule duration in our solution and had cost total 70 Rs per day these problem solution by

$E_2 = 14, 11$
$L_2 = 23, 13$

$E_1 = 0,0$
$L_1 = 0,0$

14-11

10-08

20-15

$E_2 = 23,16$
$L_2 = 23,16$

$E_2 = 25,17$
$L_2 = 25,17$

13-10

15-11

$E_2 = 13,10$
$L_2 = 13,10$

The critical path is   A —C— D — E   with normal duration 20 day and minimum length is 12 days

3- CONCLUSION
The main aim of this paper is to present the importance of operation research theoretical idea in management system using lingering programming
Researcher may get some information related to operations research and transportation problem and can get some ideas related to their field of research.

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