

Operation Research: Tool # 1. Linear Programming:

Linear programming is a mathematical technique that has application to almost all class of decision problems. This technique is applied for choosing as the best alternative from a set of feasible alternative.

In L.P.P objective function in as well as constraints can be expressed as linear mathematical function, which can be used to solve the practical scheduling problems. It is a method used for studying the behaviour of system.

L.P is mainly concerned with describing the interrelation of the components of a system. This technique is designed to help managers in planning, decision making and to allocate the resources. The management always has the tendency to make the most effective use of an organization resource. Resources include machinery raw materials, labour, warehouse, time and money.

Transportation problem:

The transportation problems are one of the types of L.P.P in which objective is to transport goods/products in various quantities of a single homogeneous item/ commodity to different destinations so as to minimize total transportation cost in everyday life the various manufacturing organizations or other establishments due to various considerations store their end products or items at various places termed as origins or ware, house when supply is to be made to users then the items are transported from origins to one or more destination the overall purpose of this process is decide a distribution policy such that total transport cost is minimum or the time consumed in transshipment is minimum.

Operations research is a quantitative approach that solves problems, using a number of mathematical techniques. It is helpful to use operations research when you're trying to make decisions but the conditions are uncertain, and when differing objectives are in conflict with each other.

Applications of Operation Research:

Allocation and Distribution in Projects: ..

Production and Facilities Planning: (i)

Factory size and location decision. ...

Programmes Decisions: ...

Marketing: ...

Organization Behaviour: ...

Finance: ...

Research and Development: