Abstract. Operations Research in Economics

Game theory is "the study of mathematical models of conflict and cooperation between intelligent rational decision-makers." Game theory is mainly used in economics, political science, and psychology, as well as logic, computer science, and biology. Originally, it addressed zero-sum games, in which one person's gains result in losses for the other participants. Today, game theory applies to a wide range of behavioral relations, and is now an umbrella term for the science of logical decision making in humans, animals, and computers.

Linear programming (LP; also called linear optimization) is a method to achieve the best outcome (such as maximum profit or lowest cost) in a mathematical model whose requirements are represented by linear relationships. Linear programming is a special case of mathematical programming (mathematical optimization).