


I'm not robot 
reCAPTCHA

Continue

For the academic journal, see [Operations Research](#) (British English: [Operational Research](#)) (OR) is a discipline that uses advanced analytical techniques to help make better decisions. In addition, the term [operational analysis](#) is used in the British (and some Armed Forces of the British Commonwealth) as an integral part of capacity development, management and support. In particular, [operational analysis](#) is part of the [Joint Operational Efficiency and Investment Assessment](#), which supports decisions to acquire British defence capabilities. It is often considered under the field of [applied mathematics](#). The terms [management science](#) and [decision-making science](#) are sometimes used as synonyms. Using the methods of other mathematical sciences, such as [mathematical modeling](#), [statistical analysis](#) and [mathematical optimization](#), [operational research](#) comes to optimal or almost optimal solutions to complex decision-making problems. Because of its emphasis on human-technology interaction and its focus on practical applications, [operational research](#) intersects with other disciplines, such as [industrial engineering](#) and [operations management](#), and relies on the [psychology](#) and [organization of science](#). [Transaction research](#) is often associated with determining the extreme values of a real target: maximum (profit, performance or profitability) or minimum (loss, risk or value). Emerging in military efforts before [World War II](#), his methods began to concern problems in various industries. The [Operational Research Review](#) (OR) includes the development and use of a wide range of methods and methods for problem-solving used in the pursuit of improved decision-making and efficiency, such as [modelling](#), [mathematical optimization](#), [queue theory](#) and other [stochastic process models](#), [Markov's decision-making processes](#), [econometric methods](#), [data queue analysis](#), [neural networks](#), [expert systems](#), [decision analysis](#) and [analysis](#). Almost all of these methods are related to the construction of [mathematical models](#) that try to describe the system. Because of the computational and statistical nature of most of these areas, OR also has close links with [computer science](#) and [analytics](#). [Operational researchers](#) facing a new challenge should determine which of these methods is most appropriate given the nature of the system, the goals for improvement and limitations on time and processing power, or develop a new method specific to the problem (and, subsequently, for this type of problem). The main subdisciplines in modern [operational research](#), as defined by [operations research](#), are: [computing and information Financial Engineering Manufacturing](#), [Service Sciences](#), and [Supply Chain Management Modeling Policy and Public Sector Work Earnings Earnings Modeling Stochastic Models Transport History](#) In the decades after the two world wars, the tools of [operations research](#) have been more widely applied to problems in business, industry and society. Since then, [operational research](#) has expanded in an area widely used in industries ranging from [petrochemicals](#) to [airlines](#), [finance](#), [logistics](#) and [government](#), focusing on developing [mathematical models](#) that can be used to analyze and optimize complex systems, and have become an area of active scientific and industrial research. Historical origins In the 17th century mathematicians, such as [Christian Huygens](#) (1629-1695) and [Blaise Pascal](#) (problem points), tried to solve problems associated with complex solutions with probability. Others in the 18th and 19th centuries solved similar problems with [combinatorics](#). [Charles Babbage's](#) study of the cost of transporting and sorting mail led to the [universal Penny Post of England](#) in 1840, as well as the study of the dynamic behaviour of railway vehicles in defence of the broad GWR rut. Beginning in the 20th century, the study of [inventory management](#) could be considered who? the origin of modern research operations with the number of economic orders developed by [Ford W. Harris](#) in 1913. [Operational research](#), perhaps original research? originated in the efforts of military planners during [World War I](#) ([convoy theory](#) and [Lanchester laws](#)). [Percy Bridgman](#) brought [operational research](#) to bear on problems in physics in the 1920s and then try to extend them to social sciences. Modern [operational research](#) was obtained at the [Baudsey research station](#) in the UK in 1937 on the initiative of the station chief [A. Rowe](#) and [Robert Watson-Watt](#). Rowe conceived this idea as a means of analysing and improving the operation of the British early warning

