

Vilaplana et al. [14]	2014	Cloud-based service	The purpose of this research is to gain insight into about the service quality in cloud computing.
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A pictorial representation of the Table.1 is shown in Fig.1

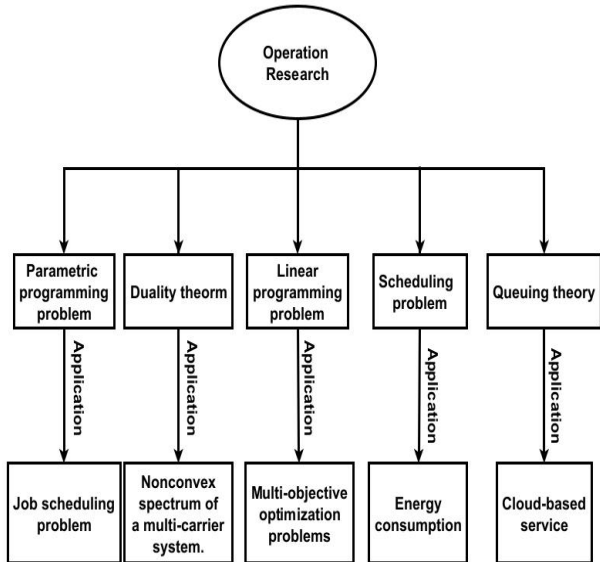


Fig.1 Pictorial representation of Table 1

Overall, Operation research plays an important role in decision-making and problem-solving across many industries and sectors. LPP is a common topic in Operation research which is discussed in detail in the below paragraph.

In this paper, our main aim is to discuss the recent trends and applications of LPP. Linear programming (LP) was invented in the late 1930s by Soviet mathematician Leonid Kantorovich and independently by the American mathematician George Dantzig in 1947 [1]. It has many applications in various fields, including economics [15], finance [16], engineering [17], transportation [18], and so on. According to V.K. Kapoor [19], "Linear Programming is the process of optimizing (maximizing or minimizing) a linear function subject to linear constraints." Additionally, we have also discussed some of the major contributions to the LPP in below Table 2 and Fig. 2.

Table 2: Influence of linear programming problem in the real-life application by the different researchers in different areas.

Authors	Year	Methodologies	Applications	Significance
Adlakha et al. [20]	2006	Heuristic algorithm	Transportation problem	The purpose of the implementation is to provide a solution for more-for-less paradox in transportation problem with mixed restrictions.

Wang et al. [21]	2008	Simplex method	Bilevel programming problem	Their approach to solving the linear-quadratic bilevel programming problem involves the use of the Simplex Method.
Bedekar et al. [22]	2009	Dual simplex method	Overcurrent relays problem	Bedekar et al. have utilized the dual simplex method to obtain coordination of overcurrent relays in the distribution system.
Kim and Dong [23]	2014	Hungarian method	Power allocation problem	The objective of this article is to find the optimal solution for power allocation in a relay-aided device-to-device communication system under a cellular network.
Karimi et al. [24]	2015	Branch and Bound Method	Supply chain schedule problem	Implementation of branch and bound technique to get a batch delivery schedule for the multi-factory supply chain.

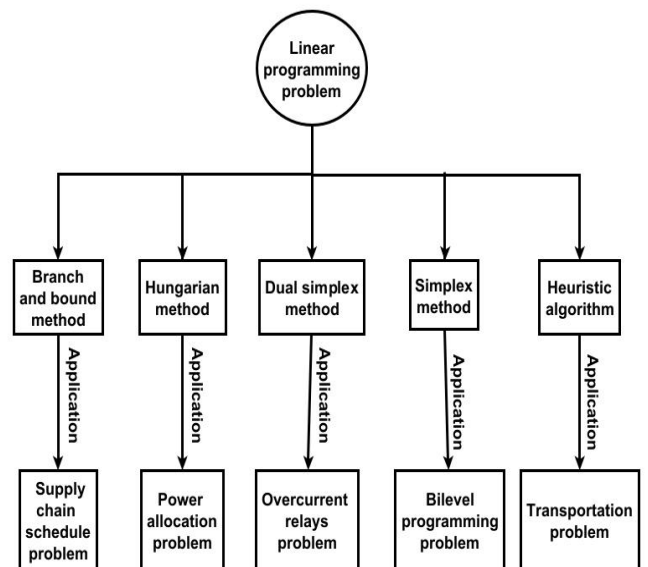


Fig.2 Pictorial representation of Table 2

and solution methods related to linear programming problems. The simplex method is discussed in detail through a comprehensive literature review. Additionally, the paper proposes an integrated research framework that is relevant to the present context and offers suggestions for future research directions. We aim to conduct a thorough investigation of the current literature on fuzzy theories, including concepts like triangular, trapezoidal, and others. We believe that relying solely on classical theory is insufficient for effectively handling uncertainty. By focusing on this perspective, our objective is to explore the literature on fuzzy theory in greater depth, enhancing our understanding in this field.

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