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# Optimization Models Used in the Textile Sector: A Systematic Review

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## Abstract

In recent years, several works have been published dedicated to obtaining optimization models. Many of them have been applied in the textile sector because they are part of the economic development areas of a country. This article's main objective is to review the literature published on optimization models and understand what methods their authors used to solve the optimization problems in the textile sector. A systematic methodology was applied to select research questions, digital databases, and search terms to utilize practical and methodological filters later to carry out this systematic review. This procedure allowed performing a review and synthesis of the results obtained on the optimization models. It was found that the models resulting from the systematic review vary depending on the areas to be optimized. The most frequent applications were logistics and production, followed by cost minimization. They were optimized mainly with linear programming, integer programming, Markov chains, genetic algorithms, and multi-objective programming. © 2022, Springer Nature Switzerland AG.

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