

## A Strategic Location Planner for Businesses using Fuzzy Logic

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### ABSTRACT

In any industry, location of any project, industrial plant, or building is highly important due to the potential damages as well as opportunities one may take. Strategic location planning is done for a business to maximize profit as well as to avert damage due to disasters. Conventional strategic planning takes months to a year to perform, due to the large number of quantitative and qualitative factors involved. Within that period, however, changes to the factors may have come into play, and any analyses done before may be invalidated at the time of completion. The Fuzzy Strategic Location System is proposed to hasten the location planning process. This system will make use of the fuzzy analytic hierarchy process (AHP), a standard decision support technique.

**KEYWORDS:** location planning; fuzzy logic; analytic hierarchy process; fuzzy decision support