

In recent years the market share of major real estate companies, at least the Czech ones, has not changed much. Statistical data don't reflect any significant upward trend in volumes of properties for rent or sale. In case the real estate company would like to access larger market share, they have to secure a competitive advantage over the others. One of the ways how to attract more potential customers might be speeding up the company website's property search process. In many cases the website visitors are facing hundreds or thousands of property offers before finding couple satisfactory ones.

The aim of the thesis is to explore possibilities of applying customer preferences in property trading. The focus is put on research of recommender system algorithms, their characteristics and limitations. The author is evaluating usage of each algorithm variant and its suitability for a real world deployment in a real estate area.

Apart from the theoretical part of the work one can find a part, where real estate information system is extended with a framework for implementing recommendation system algorithms. The author is in possession of production data of a medium sized real estate company. He uses the recommender system framework to build and evaluate example algorithm.