

## Abstract

The role of architect is to design for both aesthetical and functional purposes. Generally, color is the one of many factors which influences the whole theme. However, there is difficulty in color satisfaction. Therefore, the well-known and acceptable solution to this problem is color scheme, which is the method of choosing the appropriate color and color group for applied to the design work. In contrast, only color scheme cannot lead to a good design. The method of selecting the appropriate color has to be working with the study of Color Theory and experience.

The major objective of this research is to study and illustrate the decision supporting system for color matching in architectural design. The study and development of the system includes with analysis of color choosing method, analysis existing problems, analysis system requirements, and concerning factors. In addition, the relevant variables are evaluated and the proper procedures are applied to the CAD (Computer Aided Design) software. The selection of proper tools for advancement includes the design of working process which would develop the format of color choosing of the designer, the design of systematic structure and the design of database in order to response the desire of designer.

As a result of data analysis, the existing CAD software system which supporting the color choosing method consist of appropriate color suggestion part, selection of color from the color scheme part, color satisfactory of designer part, and color application part. The advanced system would improve the color scheme of the designer by applying color theories to the inexperienced user. Consequently, the user will realize the alternation of color and able to apply the color scheme to the architecture by the software computer which can instantly display the color scheme, also properly consult. Hence, using the database system on the CAD software can adjust the appropriate alternatives, decrease working period, and reduce functional procedures.