

## ABSTRACT

Facilities Layout Planning determined how to assign activities on the relationships between various functions best support to achieve the activity's objectives. The "Systematic Layout Planning" referred to as SLP was the procedure concerning on the relationship between activity-areas to minimize material handling cost. The SLP procedure depended on the two important considering factors, the quantitative flow of materials (material flow) and the qualitative activity relationships (other-than-flow).

In practical, the process of assigning other-than-flow relationship ratings depended on an opinion or judgement of a rater or a planner that could be effected to the arrangement of the layout. Therefore it was better to analyze all the aspect ratings by share the opinion from all members in charge of the general affairs and to develop a consensus before finally assigned the relationship rating judgements. As the reason, this project represented the "Modified Delphi" approach to generate and develop the consistency of other-than-flow relationship ratings.

This project used questionnaire as an important tool to survey and collect data. The researcher provided two rounds of questionnaire survey, the first round, collecting the data and return the majority ratings and supportive reasons to the respondents. The second round, the respondents re-examined the answer again and they might change their responses of appropriate or still insist their answer

The results from this project were more convergence after finished the survey in round 2. As this reason, this method helped to improve the consistency ratings of other-than-flow better than the traditional method. Therefore this "Modified Delphi" could be used as a supplementary tool to develop the improvement of the other-than-flow relationship ratings in the SLP approach.