ABSTRACT OF RESEARCH STUDY

The fundamental principles of project management, namely: quality, time and cost should be applied and closely adhered to right from the conceptual design stage to ensure minimal design changes that have subsequent cost and time implications on the overall development of the project. The prognosis of not so well thought out design is costly once the tenders are confirmed.

This research study aims to determine the major factors that will have a significant influence on design development time of commercial projects in Singapore and attempts to identify the differences in the role perceptions between the clients’ project managers and the design architects.

The methodology involves a questionnaire survey to determine these factors. The survey focused on the group size of the design team and client in-house team, communications, and decision-making in relation to the design development time achieved for completed projects in Singapore.

Two case studies were discussed to demonstrate the effectiveness of a client-led design development initiative and the evaluation of these case studies was compared with the findings from the questionnaire survey.
Following a brief introduction, the study discusses the design team, the role of the design leader and project manager in relation to the design development process. The RIBA Plan of Work provides a sequential and structured approach towards developing design for the design team. This is discussed in the study. However, the questionnaire survey revealed that a mixed reaction seems apparent in so far as the issue on structured and systematic approach towards the development of design is concerned. Some professionals were quite ignorance about the RIBA’s Plan of Work that sets the guideline for a structured and systematic approach for the design team.

Although it is common-sense that the larger the size of the project, the longer it will take to complete the design development of the project, this common-sense does not seem to be valid as the survey results showed otherwise.

Effective communication among the design team members and between the consultants and client is of vital importance for a successful design outcome. This aspect as well as group decision-making are discussed.

The survey revealed that the most widely used means of communication is the use of graphic presentation drawings. A majority of the respondents indicated that the use of CAD in the drafting of the design drawings enable the designers to propose fairly quickly various design options for their clients’ decision. Quality of graphic presentation as the effective means of communication proved to shorten the design development time.
One other factor is the size of both the design team and the client's in-house team. With a smaller manageable size of 4 to 6 members working on the development of the design, the design development time is normally between 6 to 7 months regardless of the size of the project.

Co-ordination and co-operation which were thought to be essential factors were somehow not rated as having a significant influence on the design development time. This could well be due to the fact that the architects and project managers have been working together in past projects and could have known each other fairly well. A clear and complete design brief is of vital importance.

In summary, communication, decision-making, leadership skills and design changes are major factors that will significantly affect the design development time of a project.