SUMMARY

Buildings in Singapore are traditionally procured using the Design-Bid-Build method. However, in the recent years, the Design and Build route has been used increasingly as an alternative method of construction procurement. Initiated by the public sector in public housing, the Design and Build procurement method is now being used by both the public and private sectors in their projects of varying complexities.

Design and Build method of procurement offers several advantages over the traditional Design-Bid-Build method in terms of improved constructibility, faster completion time of the project, greater certainty of price, single point of responsibility on the contractor, integration of both the design and construction process amongst others.

The dissertation sets out to survey the views of the local construction industry on the Design and Build procurement method over the traditional approach. The views of the industry included that of the developers, consultants (architects, civil/structural engineers, mechanical/electrical engineers and quantity surveyors), and contractors. A structured questionnaire to investigate the dissertation objective was prepared and sent out to 50 respondents of each group. Interviews were also conducted with each of the group to understand better their practical experiences in using the Design and Build procurement locally.

The main findings of the dissertation included the following:

- The single point of responsibility on the contractor in a Design and Build procurement method is viewed as a great advantage as it reduces potential disputes compared to the traditional method.
The early integration of both the design and construction functions in a Design and Build procurement method is viewed as an improvement compared to the traditional method. The early integration can contribute to a shorter project completion time as construction works can commence without the complete set of detail construction drawings. There is generally a time-savings of 10% to 20%.

The Design and Build approach is viewed to contribute to a lower construction costs than the traditional method because of greater certainty in price. There is generally a cost-savings of 10%.

There is generally a quality improvement of 5% in a Design and Build project compared to a project using the traditional procurement method.

Though the survey conducted in the study may not necessarily provide conclusive views of the whole local construction industry, the feedback obtained from the respondents conclude that the Design and Build procurement method is a viable mode of construction project delivery.