Summary

An analytical framework using integrated approach is developed to be used as a design strategy for building projects. In the pursuit of an integrated building-delivery system, attention should be focused on the processes of integration such as partnering between practitioners and developing understanding among them.

Design strategies from various disciplines are collected through a review of literatures. All design strategies and data are empirically derived and have been used in one or more buildings throughout the world. Strategies with common activities are compared with input from industry's practitioner in the development of the proposed framework.

The examination of these data and the development of the framework show that the movement towards accepting and incorporating integrated methods and techniques within the construction industry are growing. Owners and developers are changing their outlook on cost associated with building design, construction, and renovation from a concentration on initial costs to a broader encompassment of a building's lifecycle costs. This change has led a movement towards integration in building design.

However, to complete this movement the complex interactions and dependencies among the building systems and the changes that they experience, which through this research have been shown to exist, must be addressed and represented in a simple yet comprehensible framework.

Development of the framework provides new insight into the nature of design process adopted by different professions, and the variety and applicability of techniques to achieve the design goal. A building designer could use this proposed framework as a strategy to properly apply integration on building throughout the design stage.