A CLASSIFICATION FRAMEWORK FOR DESIGN-BUILD VARIANTS FROM AN OPERATIONAL PERSPECTIVE

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Abstract
Design-build (DB) is a generic form of construction procurement, and, rather than simply representing a single system, it has evolved in practice into a variety of forms, each of which is similar to, and yet different from each other. Although the importance of selecting an appropriate DB variant has been widely accepted, difficulties occur in practice due to the multiplicity of terms and concepts used. What is needed is some kind of taxonomy or framework within which the individual variants can be placed and their relative attributes identified and understood. Through a comprehensive literature review and content analysis, this paper establishes a systematic classification framework for DB variants based on their operational attributes. In addition to providing much needed support for decision-making, this classification framework provides client/owners with perspectives to understand and examine different categories of DB variants from an operational perspective.

Keywords
Design-build, operational variations, classification.

INTRODUCTION

The construction industry is well known for its highly fragmented organizational structure and it is no coincidence that this is reflected in traditional project organization and procurement arrangements. Over the last two decades, however, the situation has changed considerably, with the emergence of a wide variety of new forms of project organization. Of particular note is the Design-Build (DB) procurement method, which has been demonstrated to be an effective method and has gained in popularity worldwide in recent years (Konchar and Sanvido, 1998; Haque et al., 2001; Hale et al., 2009; Park et al., 2009; Rosner et al., 2009). With DB, a single entity or consortium is contractually responsible for both the design and construction of a project (Songer and Molenaar, 1997) instead of the traditional strict organizational and contractual separation of these functions.