



KEY POINT SUMMARY

OBJECTIVES

This study seeks to explore the impact of separate and integrated project coalitions on considered and exercised flexibility during different phases of a healthcare construction project.

Project Coalitions in Healthcare Construction Projects and the Application of Real Options: An Exploratory Survey

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Key Concepts/Context

To ensue easy adaptation to the increasingly complex and changing healthcare environment, flexibility in healthcare assets is necessary. However, minimal research has been conducted to gain insight into how health organizations currently integrate flexibility into their real estate projects.

Methods

For this study a survey was distributed to 76 cure and 148 care Dutch health organizations. Of the health organizations that received the surveys, 22 cure (35%) and 23 care (17%) responded to the survey.

The questionnaire was comprised of close-ended questions followed by open-ended questions to allow for an explanation of the answers, and contained the following sections: (1) characteristics of respondents, (2) position of real estate management within the organization, (3) chosen project coalition and considerations for choosing project coalition, (4) flexibility “on” and “in” in the construction project, and (5) value of real options in the project.

Analysis for the survey was conducted using multiple-choice answers for questions in sections 1 and 2, while questions in sections 4 and 5 used a 5-point Likert scale or N.A. (not applicable) to rate the answers. For section 3, organizations in the cure sector were asked to choose the most important consideration from a list of choices, while care organizations were asked to rate the list of choices according to importance using a 5-point Likert scale. Demographic statistical analysis was used for all multiple-choice questions. Questions using the Likert scale were analyzed using a Friedman test.



DESIGN IMPLICATIONS

This research suggests that more flexibility is considered in advance of the project than is actually realized during and after construction, and that large differences in economic feasibility exist between separate and integrated project coalitions. Contractors and healthcare organizations should carefully consider the type of coalition needed to integrate flexibility into healthcare construction projects in a way that will assist the healthcare organization in navigating the rapidly changing landscape of healthcare.

Findings

Findings from this study revealed that most Dutch health organizations studied chose a separated form of project coalition (60%). The remainder of the health organizations studied chose various types of integrated project coalitions, with DB being the most frequently chosen type of integrated project coalition at 11%.

Within the cure sector the most important external consideration for choosing a type of project coalition was “market and the availability of parties.” According to the organizations in the care sector, the most important external consideration identified was “law and regulations.” Interestingly, “law and regulations” was considered most important by only 17% of cure organizations, creating a striking difference between the two sectors. When rating internal considerations, “knowledge, experience, and capacity” was the most important factor in the cure sector. Within the care sector, the most important internal consideration was finance. For project-related considerations, cure organizations chose money and complexity as the most important considerations, while the care sector rated money and quality as the most important.

To answer the remaining questions in sections 4 and 5 of the questionnaire participants were asked to select one project involving their organization. For the projects represented within the participating organizations, only half of the organizations had structurally arranged their financing for that project. When assessing the position of Corporate Real Estate Management (CREM) the participating organizations mostly manage their real estate via the following typologies: (1) decentralized (shared among various facility services) and (2) centralized (in a staff department under the board). However, no relation was found between the different types of project coalitions and the position of the CREM department.

In evaluating the difference between considered and exercised flexibilities, results revealed that integrated project coalitions consider on average 91% of all the real options. However, of those real options only 73% of the options had been exercised. In contrast, separated project coalitions considered on average 71% of all the real options, with only 45% of those options being exercised. For both types of project coalitions, the most considered and exercised option was changing the design. Other options that were also widely considered were the ability to grow or to shrink. However, these options were less often exercised than considered. The most considered option after changing the design was defer, while abandon was less often considered. Interestingly, while they were not considered to the same degree, results revealed that both options are equally exercised. The option to abandon was exercised to a significant extent (scores of 4 or 5) by the three participating separate coalitions.

During the operation and maintenance phase, grow, scale, and switch options were the most considered and exercised options. In assessing the economic feasibility of



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the switch option, results revealed that for integrated project coalitions the feasibility of this option was nearly the same when considered in advance and actually exercised. In contrast, separate coalitions reported the feasibility to be much lower to exercise than when considering the option of switch in advance.

Limitations

The main limiting factor to this study is its exploratory nature. Due to this, the small sample size and use of a non-validated tool limits validity, and generalizability is limited by the location of the study. However, the findings from this study do begin to highlight opportunities for future research.