

Abstract

Title: 4D Scheduling – Implementation in an Irish Construction Company

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Purpose: The purpose of the research was to prove through a review of the relevant literature and by carrying out primary research within the authors own organisation, a leading Irish Construction Company, that 4D scheduling is essential to the improved delivery of construction projects. Through carrying out this research the author's intention is to develop a set of recommendations for implementing 4D in his own organisation.

Methodology: A comprehensive Literature Review was undertaken in order to gain a better knowledge of 4D and how it could be implemented. With the knowledge gained semi-structured interviews were conducted with the management of the author's own organisation. The purpose of this was to get an insight into the level of knowledge, understanding and receptivity to 4D within the organisation. The researcher also wanted to gain an understanding of what skill levels and resources the participants deemed necessary to implement the technology.

Findings: The researcher found through the literature review that 4D could bring many advantages to the construction delivery process by making construction schedules easier to understand by all participants. The literature review documented the problems associated with current methods and how these could be resolved by using 4D. It also substantiated to some extent the requirements necessary for 4D implementation. The primary research reinforced the

findings of the literature review and outlined benefits that were not previously documented. The most positive aspects of the primary research was that all interview participants believed the company should implement 4D scheduling and were of the opinion that all of the large Irish Construction companies would be employing 4D technology within the next five years. One of the objectives stated in the introduction chapter was to be able to outline a series of recommendations for the implementation of 4D in the company with the assistance of the information gathered during the course of the research. This was achieved and the recommendations are contained in Chapter Five of the Dissertation

Keywords: 4D Scheduling, 4D Modelling, 3D Modelling, Irish Construction Industry, Semi-structured Interviews.

Classification: 4D Scheduling