

Application of Agile Project Management to Construction Projects: Case Study

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Abstract : Agile project management (APM) has been developed originally for software development project. Construction projects seemed to be more apt to traditional water-fall approach than to APM. However, Construction project suffers from similar problems that necessitated the invention of APM, mainly the need to break down the project structure to small increments, thus minimizing the needed managerial planning and design. Since the classical structure of APM is not applicable the way it is to construction project, a modified version of APM was devised. This method, nicknamed 'The anchor method', exploits the fundamentals of APM (i.e., iterations, or sprints of short time frames or timeboxes, cross-functional teams, risk reduction and adaptation to changes) and adjust them to the construction world. The projects had to be structured appropriately to proactively and quickly adapt to change. The method aims to encompass human behavior and lean towards adaptivity rather than predictability. To enable smooth application of the method, a special project management software was developed, so as to provide solid administrative help and accurate data. The method is tested on a bunch of construction projects and some key performance indicators (KPIs) are collected. According to preliminary results the method is indeed very advantageous and with proper assimilation can radically change the construction project management paradigm.

Keywords : agile project management, construction, information systems, project management

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