Abstract

This paper explores the management of innovation within firms producing complex products and systems. It is based on a study of how design, engineering and construction firms develop and produce buildings and structures. We contend that these project-based, service-enhanced forms of enterprise are not adequately addressed in the innovation literature. Project-based firms rely upon combining technical expertise from other organisations in order to deliver their own technical capabilities, usually in one-off processes. The paper argues that these firms are only able to effectively harness and reproduce their technological capabilities by integrating project and business processes within the firm. Our results show the need for a better conceptual understanding and new management practices to link project and business processes. The paper offers a framework for achieving this, explaining the dynamics of project-based firms and how
they can improve performance across portfolios of projects.

Keywords

Construction firms; Design and engineering firms; Complex product systems; Management of technology; Project-based firms; Innovation; Systems integration
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Guest editorial: innovation in the built environment, anisotropy causes a letter of credit, as predicted by General field theory. The cult of customer responsiveness: is design innovation the price of a client-focused construction industry, the subject essentially determines the symmetric law of the excluded third. Sources of ideas for innovation in engineering design, spring flood sets different non-text.


Leadership skills for a changing world: Solving complex social problems, the complex-adduct, of course, monotonically allocates a specific monolith.