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Embracing Paradox and Conflict: Towards a Conceptual Model to drive Project Portfolio Ambidexterity

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Abstract

An organisation's portfolio of new product development (NPD) projects represents its potential for survival. Innovation ambidexterity holds the key to longevity. Accordingly, selecting the *right* projects for a portfolio critically impacts organisational success, both in the short and longer term. Selecting for successful portfolios is further complicated in dynamic, highly competitive and highly regulated markets. Furthermore, in current economies that demand value from investment, decision-making around project selection for the portfolio becomes even more crucial. However, there is a dearth of discussion and empirical evidence that focuses on project portfolio selection and more specifically in contexts of ambidexterity and ongoing change. Moreover, the tensions between exploratory and exploitative projects are likely to be made salient during project portfolio selection, and manifest in conflicts between different selection options, yet these tensions have not yet been addressed in the portfolio selection literature. Drawing on the current and heretofore non-connected literatures across fields of ambidexterity and paradox, project portfolio selection, cognition and performance control, this paper proposes an initial conceptual model of the factors that impact project portfolio selection and ambidexterity. This paper contributes to a greater appreciation of the pivotal role of project portfolio selection, as distinct from project and portfolio management, in generating a portfolio that drives organisational success. Moreover, it identifies performance measures and managing conflict as important determinants of project portfolio ambidexterity. Future work is required to enhance and validate this model.

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1. Introduction

Innovation is the life-blood of industry 'lying at the heart of firms' value creation, survival and growth in contemporary environments' [1] p.356. Organisations drive new product innovations through new product development (NPD) projects and programs [2]. Nowadays a firm's portfolio of NPD projects represents that firm's commitment to a specific group of NPD projects [3-5], individually selected and holistically managed to leverage the higher cumulative potential for success [6, 7]. Accordingly, the performance of the portfolio bears directly and critically on the firm's overall performance [8-11]. However, the bulk of the expanding portfolio literature focuses on the management of the group of projects within a portfolio including managing the challenges of co-dependency and inter-dependency between projects. Less knowledge exists about the earliest yet critically influential stage that impacts the constitution of the portfolio, namely the selection of specific projects into the portfolio. The emphasis during project portfolio selection is on choosing the best projects for the portfolio, as opposed to managing them therein. In other words, project portfolio selection is about doing the 'right projects' (selecting the best ones) rather than 'doing the projects right,' (managing those projects), [4, 9]. Our research adds to calls for insight into project portfolio selection.

Furthermore, today's contemporary environment poses great challenges to innovation, especially for high technology industry, because of its ever-evolving and constantly changing nature described in the literature as 'dynamic,' 'fluid,' 'highly competitive' and 'increasingly global,' [12, 13]. Coupled with the remarkable speed at which human health medicine and technological competences are advancing, enormous pressure exists for high technology industries to be able to remain competitive and grow in their markets [14, 15]. In today's environment, it is therefore no longer sufficient for companies to engage in a single type of innovation. Indeed, since Duncan [16] introduced the term 'ambidextrous organisation,' a substantial body of research has demonstrated that organisational success and long- term survival depend upon organisations' ability to manage two types of innovation, short-term exploitative and long-term explorative innovation, simultaneously and equally well. March [17] explained that companies need to exploit existing assets and capabilities to survive in the present, but also to explore future options to avoid being rendered irrelevant by changes in markets and technologies [17, 18]. Organisational ambidexterity has been shown to have a positive relationship with organizational performance and particularly in conditions of market uncertainty [18] and increased competitiveness [19]. As such, the NPD project portfolio represents an essential basis for an ambidextrous combination of innovation type projects to ensure current day and long-term organisation survival, further emphasising the criticality of project portfolio selection.

However, we find a dearth of literature focused on how NPD project portfolio-based ambidexterity can be achieved. More specifically, there is a gap in our understanding of how project portfolio selection decisions are made and how these decisions impact on the generation and maintenance of an ambidextrous portfolio. Furthermore, whether performance measurement systems have a role in supporting project portfolio selection for ambidexterity, remains understudied. Considering that management control systems have been shown to contribute toward innovation management [18, 20-24], it is likely that performance measurement systems, a type of management control, will do too.

In summary, whilst the challenges of managing strategic paradoxes (as represented in managing innovation ambidexterity) and the importance of portfolio selection are acknowledged in the literature, a relatively poor volume of literature exists that links theory with the practical mechanisms that drive project portfolio selection for ambidexterity. Our research aims to help rectify this situation. Our objective in this paper is to develop a preliminary conceptual model of the factors that impact project portfolio selection for ambidexterity. To do this we distil a diverse