

**CITY UNIVERSITY OF HONG KONG**

香港城市大學

How to Achieve Incremental and Radical Innovation:

The Role of Knowledge, Strategic Orientation and  
Dynamic Capabilities

如何實現漸進式和顛覆式創新：

知識、戰略導向和動態能力的角色

**Submitted to College of Business**

商學院

**in Partial Fulfillment of the Requirements**

**for the Degree of Doctor of Business Administration**

工商管理學博士學位

by

**Wong Kwok Lun**

黃國麟

**June 2018**

二零一八年六月

## **Abstract**

This study empirically investigates the impact of strategic orientation, market knowledge and technical knowledge on incremental innovation and radical innovation, which will impact on firm performance. In addition, the moderating effect of dynamic capabilities among strategic orientation, market knowledge, technical knowledge, incremental innovation and radical innovation has been included in this study. The findings have revealed that there is positive influence of innovation orientation and entrepreneurial orientation on different types of innovation. However, radical innovation requires a higher level of both innovation orientation and entrepreneurial orientation than incremental innovation. In addition, the empirical research has found out that there is a positive impact of technical knowledge & market knowledge on different types of innovation. However, radical innovation requires a higher level of technical knowledge and market knowledge than incremental innovation. More importantly, among the two types of knowledge, market knowledge is more important than technical knowledge in both incremental innovation and radical innovation. This study has found out the complicated nature of dynamic capabilities as the moderating factor between innovation antecedents and types of innovation. In general, dynamic capabilities has a positive moderating effect between innovation antecedents and different types of innovation. However, there are two exceptions on moderating effect of dynamic capabilities. The positive effect of entrepreneurial orientation on incremental innovation decreases when dynamic capabilities is high. Incremental innovation involves the improvement of existing products or services. It may not

require a firm to be agile and fast-moving. When dynamic capability is high, too many new information or ideas and the change of routines may hinder the firm to develop incremental innovation. Another surprising finding is that dynamic capability does not moderate the relationship between technical knowledge and incremental innovation, because incremental innovation is relatively easy to implement with the technical knowledge, and there is no need of dynamic capabilities to re-configure the resources. Empirically, the author also found out that both incremental and radical innovation have a positive impact on firm performance. However, there is a stronger impact of radical innovation on firm performance than incremental innovation.

This research has both theoretical and practical significance. The first theoretical significance is to establish a more comprehensive framework and an integrated theory to explain the complex phenomenon of innovation, instead of using one single lens to explain innovation. The second theoretical significance is to differentiate radical innovation from incremental innovation in this study. The third theoretical significance is to test the moderating effect of dynamic capabilities, and to integrate the theory of dynamic capabilities in the theory of strategic orientations and knowledge-based view. On the other hand, there is practical and managerial significance as well. This study is to help the business managers understand more thoroughly innovation antecedents and different types of innovation, so that business managers can firstly decide on incremental innovation or radical innovation to pursue, because different types of innovation will require different strategic orientation and types of knowledge. The second managerial significance is whether a firm should focus on acquiring market

knowledge, or technical knowledge, or both, in order to pursue incremental innovation or radical innovation. The third managerial significance is to help the business managers understand the organization strength of dynamic capabilities, in order to facilitate the development of incremental or radical innovation.

**Keywords:** incremental innovation, radical innovation, innovation orientation, entrepreneurial orientation, market knowledge, technical knowledge, dynamic capabilities and firm performance