## CITY UNIVERSITY OF HONG KONG

香港城市大學

## Creating Dynamic Collaborative Innovation Networks: Sustainable Development of Technological SMEs

創造動態可合作創新網絡: 科技中小企的持續發展

**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

Lo Kwok Wai (Davy) 羅國威

**December 2013** 二零一三年十二月

## **Abstract**

Technological start-up companies and small and medium enterprises (SMEs) in the Hong Kong electronic industries rely on innovative products and creative marketing in order to move up along the value chain. However, they are confronted with the problems of rapidly changing markets, short product life cycles, powerful customers and severe competitive pressure. Although new products can help SMEs access niche markets, these markets require innovative products with significant differentiation and consumers' value, requiring a mechanism for SMEs to solicit good ideas from different sources. For over a decade, the HKSAR Government has deployed innovation policies that play a vital role in nurturing SMEs in turning creative ideas into viable commercial products or services.

This research aims to understand how these technological SMEs have identified appropriate external partners in order to establish, coordinate and manage collaborative networks for innovation. This study examines three technological SMEs with different backgrounds and businesses. A qualitative approach was deployed for retrospective longitudinal multiple case studies, combining the Grounded Theory method for data collection and analysis. The research design helps to provide most of the answers to the research questions and contributes two key findings as new knowledge to the literature:

- 1. Multiple cycles of a 3-phase simplified innovation process are interlinked in the holistic and iterative innovation and business development of the focal firms.
- 2. The dynamism and dynamic capabilities of the collaborative innovation networks help the focal firms as well as the network actors.

The research outcome will hopefully contribute to society and communities by helping more technological SMEs (through direct and indirect involvement) to accelerate their growth and success in the global market.