

Chapter 8

Critical Success Factors for Strategic Management of ITF R&D Projects Commercialization: An Industry Expert Perspective

Siu Cheung Ho

City University of Hong Kong, Hong Kong

Kong Bieng Chuah

City University of Hong Kong, Hong Kong

ABSTRACT

Hong Kong's logistics and supply chain industry is facing challenges in this dynamic business environment. To increase the competitive advantage of the company, research and development (R&D) technology is a good tool for the company survive and create the core advantage in the company. This chapter reviews the existing Hong Kong logistics and supply chain trends, evolution of innovation, and evaluates the factors of new technology adoption. This research identifies the critical issue influencing R&D product commercializes to the market. The in-depth interview with the typical industry experts will be conducted to understand their deep-seated worry concerns and considerations for adopting the ITF R&D deliverables in the firm.

INTRODUCTION

This research aims to find out which critical issues affect R&D technology transfer to the industry. R&D Technologist always faces various challenges to explore and develop new R&D technology to the Logistics and Supply Chain Industry effectively and match with industry need. While the technology developed, only few companies willing to adopt this R&D technology deliverables in their own companies.

The main objectives of this study is to find out the solution for the captioned questions and use the multi-perspective to analysis how to enhance the commercialization rate to the Logistics and Supply

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Chain Industry in Hong Kong. It will investigate Industry's perspective to see what method(s) can align with the industry and eliminate the gap in the development process. R&D project commercialization and adoption in this research is defined into two perspectives of R&D technologist and industry. Successful commercialization and adoption of R&D project deliverables are defined as the whole R&D project completed, commercialized and adopted in the industry. This chapter is a part of the author's research focusing on Industry side as qualitative research.

PROBLEM OF ITF R&D PROJECT COMMERCIALIZATION IN HONG KONG'S LOGISTICS AND SUPPLY CHAIN INDUSTRY

Figure 1 is ITF R&D project concept from science stage (science) develop the R&D technology to the industry (market) through basic research, applied research and experimental development to verify the developed technology is beneficial for the industry (Ho and Chuah 2018).

ITF R&D project involves many operations steps and conditions need to be fulfilled for monitoring whether ITF project deliverables are matching with industry requirement for further commercialization and adoption. Figure 2 is the operation low diagram of ITF project, it has many control point such as progress report for the technical and administrative status of the project and audited account to check whether the funding used in a suitable area in complying the regulation. (Ho and Chuah 2018)

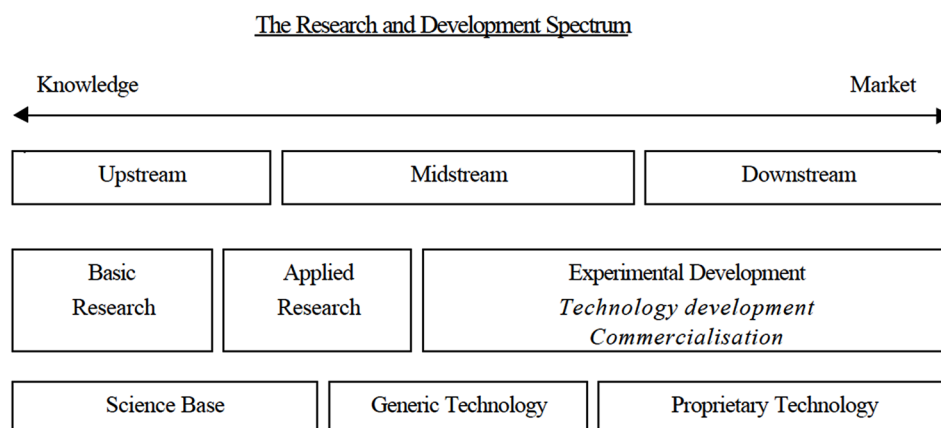
According to Ho and Chuah 2018 & Ho and Chuah 2017, many ITF projects were not successful completed and transferred the developed technology in the Hong Kong's Logistics and Supply Chain Industry. The problems are:

Problem 1 - Control and Time Issue: Long period of time for approval in proposal stage

Problem 2 - Time and Control Issue: Project development process is too long (From proposal stage to project completion stage)

Figure 1. The research development spectrum

A schematic diagram of the different stages of activity in the R&D spectrum is set out below for reference.



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