

**THE HONG KONG POLYTECHNIC UNIVERSITY  
DEPARTMENT OF MANAGEMENT & MARKETING**

**DEPARTMENTAL RESEARCH SEMINAR**

**"Optimal Response to a Next Generation New  
Product Introduction: To Imitate or to Leapfrog?"**

**By**

**Dr Ben Liu  
Quinnipiac University, US**

**Date: Tuesday, 12 Jun 2007**

**Time: 3:00 p.m. - 4:30 p.m.**

**Venue: M802**

**All interested are welcome**

Optimal Response to a Next  
Generation New Product  
Introduction:  
To Imitate or to Leapfrog?

Ben S. Liu  
(with D. Sudharshan  
& Brian T. Ratchford)

## Agenda

- I. MOTIVATION
- II. THE MODEL
- III. MODEL ANALYSIS RESULTS
- IV. DISCUSSIONS

## DISCUSSIONS

- Answers to
  - (1) How should the follower respond to the leader's technological advancement? When and to which technology level?
  - (2) What are optimal strategies for the leader with perfect foresight?

## Four Extensions

1. Longer time horizon and more than three technology levels,
2. Customers choose the closest technology level,
3. Model with (profits, cost) discounting,
4. Model with w-o-m effect,

The results remain the same qualitatively.