

THE HONG KONG POLYTECHNIC UNIVERSITY DEPARTMENT OF MANAGEMENT AND MARKETING

Departmental Research Seminar

Heterogeneity of New Product Diffusion in CPG Markets and Implications for Brand Strategy

By

Dr Masakazu Ishihara
New York University



Date : 29 Nov 2024 (Fri)
Time : 10:30 am – 12 noon
Venue : M802, PolyU

Abstract

This paper studies the role of natural early adopters in new product diffusion for consumer-packaged goods (CPG). The roles of early adopters (innovators) have been studied extensively in new technology diffusion, but little is known about their existence and relation to new product diffusion in CPG markets. Using 31 CPG categories in the U.S. between 2001 and 2012, we first propose a behavioral measure for consumers who consistently adopt new products early (we call them natural early adopters or NEA). We find that NEA indeed exist in CPG markets, but not across all categories. Using the behavioral measure, we segment consumers into NEA and NLA (natural late adopters), and study heterogeneity in new product diffusion patterns in terms of within- and across-segment influences. We cluster 329 new products across 8 categories using an extended latent-class saddle model. We identify four types of diffusion patterns (“Runaway success,” “Success,” “Niche,” and “Failure”) and discuss the roles of NEA and NLA in each diffusion type. For example, we find that new products in the “Runaway success” cluster are associated with a high adoption rate by NEA and their influence on NLA, whereas “Niche” is characterized by within-segment diffusion only. We then provide additional analysis on how the four diffusion types are related to survival rates and brand loyalty. Our findings suggest that there is little relationship between the diffusion pattern and survival rate, indicating that measuring new product success by survival may miss products that were short-lived but successful. Furthermore, we find that the key difference between “Success” and “Failure” categories is consumer brand loyalty.

Dr Masakazu Ishihara is an Associate Professor of Marketing at Stern School of Business, New York University. His research focuses on quantitative marketing, empirical industrial organization, and applied econometrics, with particular interest in the dynamic effects of marketing strategies, forward-looking decision making by consumers and firms, and marketing, management, and economics of the entertainment industry. His research has been published in journals such as *Marketing Science*, *Management Science*, *Journal of Marketing Research*, *Quantitative Marketing and Economics*, *Organization Science*, and *Journal of Econometrics*. He received his B.S. and M.S. in Economics from the University of Wisconsin-Madison, and his Ph.D. in Marketing from the Rotman School of Management at the University of Toronto.

All interested are welcome.



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

Department of
**MANAGEMENT
& MARKETING**
管理及市場學系