

# THE HONG KONG POLYTECHNIC UNIVERSITY DEPARTMENT OF MANAGEMENT AND MARKETING

## Departmental Research Seminar



### Modeling the Dynamic and Heterogenous Decision Process During Consumers' Short Video Watching Behavior: An Extension of Sequential Information Sampling

By

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**Time : 10:30 am – 12:00 noon**

**Venue : M802, PolyU**

#### Abstract

E-commerce short videos are important touch points between consumers and products. Compared with traditional e-commerce artifacts such as images and texts which are static in nature, a fundamental characteristic of short videos is that the information contained in short videos is dynamic and heterogeneous across time. However, existing theoretical lenses of information processing in information systems, such as dual-process theories of cognition, do not adequately account for the “process” of decision making. To understand the process of consumers’ decision making during their watching of short videos, a new tool that can capture the dynamism and heterogeneity is needed. In this study, we develop such a model, which is rooted in sequential information sampling and has the capability to account for consumers’ heuristic processing of situational cues from short videos. By applying our model to a data set collected from a top e-commerce platform in China, we discover significant effects of situational cues such as color features and the presence of faces in the frames of short videos on consumers’ click decisions, while static logistic regression models cannot capture these effects. We also demonstrate that the model considering the dynamism and heterogeneity is superior to those that don’t in describing and predicting consumer behavior.

**Prof. Xi Chen** is a Professor of Data Science and Engineering Management at the School of Management, Zhejiang University, China. He obtained his BS (Management Information Systems) from Fudan University, MS (Information Systems) from the National University of Singapore, and Ph.D. (Information Systems) from the University of Hong Kong. His research interests are in the areas of mobile commerce, social network, and data mining. His research has appeared or is forthcoming in *Information Systems Research*, *INFORMS Journal on Computing*, *Decision Support Systems*, *European Journal of Operational Research*, *Information & Management*, *Journal of the American Society for Information Science and Technology*, *International Journal of Production Economics*, and *Electronic Commerce Research and Applications*.

**All interested are welcome.**



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