

NATIONAL UNIVERSITY OF SINGAPORE

School of Computing

Graduate Research Paper Presentation

Title: Understanding the Impact of Price Increase on Usage Behavior: the Role of Sunk Cost Effect and Fairness Concern

Speaker: Mr Zhang Xiaoqing (PhD Student)

Date/Time: 2 February 2017, Thursday, 12:00 PM to 01:30 PM

Venue: Executive Classroom, COM2-04-02

Chaired by: Dr Phan Tuan Quang, Assistant Professor, School of Computing
(phantq@comp.nus.edu.sg)

Supervisors: Dr. Tuan Quang PHAN and Assoc Prof Huang Ke-Wei

Examiners: Assoc Prof Goh Khim Yong and Assoc Prof Heng Cheng Suang

ABSTRACT:

Some firms keep existing customers untouched when they have to increase prices for their products/services (i.e. grandfathering existing customers), in order not to 'antagonize' existing customers. In this paper, we examine the effect of increasing subscription price and 'grandfathering policy' on subscribers' video viewing behavior. We first build analytic models, incorporating sunk-cost effect and fairness concern, to obtain theoretical predictions and propose hypotheses based on the predictions. Then we testify the hypotheses with data collected from a video-streaming service provider, which implemented a price increase field experiment. Our empirical results suggest that sunk-cost effect and fairness concern co-exist and the overall effect of price increase depends on the relative strength of each effect. For new users (users with usage history of less than 1 week before subscription), who are unlikely to be aware of the price increase event and less fair-minded, sunk-cost effect takes charge and increasing price improves activeness. However, for old users (users with usage history of more than 7 weeks before subscription), fairness concern takes charge and increasing price reduces activeness. Also, for the sake of fairness concern, grandfathering policy increases subscribers' activeness. This effect is strong on old users, while insignificant on new users, confirming that new users are less fair-minded.