YILONG LIANG

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EDUCATION

University of Minnesota
Ph.D. in Marketing *Expected 2020*
M.S. in Industrial Engineering *2014*

Chinese University of Hong Kong
B.E. in Systems Engineering and Engineering Management *2011*

RESEARCH INTERESTS

Channel and Retailing, New Technology Marketing

WORKING PAPERS

Subscription in Multi-Product Context, *with Yue Qian, Tony Cui and George John* **(Job Market Paper)**
Subscription pricing has become more and more popular for not just service but also tangible products. In this paper, the authors study the effect of the adoption of subscription plan on customers purchase behavior under a grocery retailings setting. Although there are plenty of previous researches about subscription/flat-rate pricing, those researches focus on the causes and consequences of the subscription of the focal product/service. We extend concerns to other products within and in different categories to understand the effect of subscription in an omni-channel retailing environment. We find that after subscribing to a product, customers purchase more other products . For the customer who subscribes a product, there is a higher chance of purchasing other products in the day when the subscribed product is delivered. We also find that customers consume more of products that are complementary to the subscribe products using machine learning technics. Such evidences indicate that subscription of products increases other products consumption by reminding the customers of the brand.

How Offline Experience Changes Online Behavior of Member-Customer Segments, *with Yue Qian, Tony Cui, George John and Shilei Yang(Submitted to Journal of Marketing)*
Many digitally native brands have expanded into offline channels. A small literature has documented that such additions may increase non-store sales due to complementarity effects, or conversely, may decrease non-store sales on account of substitution effects. However, without exception, these effects have been documented at the firm level, with no accommodation of the possibility that segments of the firm's customers might have opposite reactions. We investigate this issue with panel data from a digitally native grocery retailer in a Chinese metro area that added 4 stores over a period of time. Working out of a quasi-experimental causal inference framework, membership and transaction records from over 10,000 customers showed opposite causal effects for heavy volume customers versus light volume customers. The former segment shifted some post-treatment purchases offline, decreasing its non-store purchases on account of two channel service output dimensions. First, the superior non-digital product attribute information (e.g., freshness) provided offline shifted sales of perishable grocery categories. Second, the no-waiting offline service output shifted sales of long delivery waiting time products. In contrast, the light volume segment increased its non-store post-treatment purchases of store-label products on account of the more credible brand image signaled by offline stores. We conclude with suggestions for fashioning more effective channel addition initiatives for digitally native retailers.

Too Smart To Be Good: Cognitive Hierarchy in Principal-Agency Problem, *with Yuxin Chen and Tony Cui*

Research has suggested that agents may have different levels of strategic-reasoning capabilities. Some agents are able to make more strategic decisions while others make less strategic decisions. This provides a big challenge for a principal to decide on which type of agents to recruit for completing a task. In this paper, we examine a principal's recruiting strategy when agents may have different strategic capabilities. The principal determines the optimal agency combination with appropriate compensation plan. Surprisingly, we find that recruiting both strategic and non-strategic agents can be optimal than recruiting strategic agents only. Such a hybrid team arises due to the risk posed by the non-strategic agent's randomness. When working with a non-strategic agent, a strategic agent is faced with more extreme outcomes. When extremely low team effort level is unfavorable, the strategic agent has higher incentive to work harder to avoid the situation, resulting in lower compensation needed for the same amount of effort.

WORK IN PROGRESS

"Downsizing for Omni-Channel Company"

PRESENTATIONS

Marketing Science Conference, Rome	*2019*
Haring Symposium, Indiana University	*2017*

TEACHING EXPERIENCE

Instructor, Principles of Marketing	*Spring, Fall 2017*

HONORS AND FELLOWSHIPS

Fellow, Marketing Science Doctoral Consortium	*2019*
PhD Students Travel Fellowship	*2019*
Carlson School Dissertation Fellowship	*2018*
Marketing PhD Students Fellowship	*2014 - 2018*

LANGUAGE AND SKILLS

Chinese (native), English (Fluent)

Stata, C/C++, Python(Web Scraping, Basic ML models), R, Mathematica

REFERENCES

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