



Selling Format and Seller Services in Online Retailing

by

Mr Jianyue Wang

PhD candidate

Operations Management

ISOM, HKUST

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Abstract:

In this paper, we develop several game theoretic models to study the selling format and seller service strategies of an online retailer. In our analysis, we consider two common selling formats, agency selling and reselling, and two common seller services, paid advertising and free information sharing services. When the online retailer offers advertising service, there is a cost sharing flexibility effect that creates more incentive for a seller to buy advertising under agency selling than reselling. Moreover, a higher cost of advertising effort mitigates the double marginalization effect of wholesale price and increases supply chain efficiency under reselling. When the online retailer does not offer advertising service, the cost sharing flexibility effect does not exist and the wholesale price no longer depends on the cost of advertising effort. When the online retailer offers both advertising and information sharing services, we fully characterize the equilibrium selling format, advertising fee, wholesale price, advertising effort and retail price. The seller prefers agency selling to reselling if the commission rate is low, whereas the reverse is true for the platform. Either firm prefers agency selling to reselling if the cost of advertising effort is low, or either the demand signal accuracy or demand uncertainty is high. We also consider the cases when the online retailer either offers advertising service but not information sharing service, or does not offer any of these two services. When more seller services are offered, the parameter space in which the supply chain profit is higher under agency selling than under reselling becomes larger. Moreover, the parameter space in which either firm prefers or both firms prefer agency selling to reselling becomes larger.

Bio:

Jianyue Wang is a fifth-year Ph.D. candidate in Operations Management at the Department of Information Systems, Business Statistics and Operations Management (ISOM) at the HKUST Business School, supervised by Prof. Albert Ha and Prof. Ki Ling Cheung. He received his bachelor's degree in control science and engineering from Zhejiang University. His research interests include supply chain management, OM/marketing interface, and sustainable operations.

All interested are welcome!

Enquiries: Dept of ISOM