ABSTRACT

We study the pricing and capacity allocation problem of a service provider who serves two distinct customer classes. Customers within each class are inherently heterogeneous in their willingness to pay for service, but their utilities are also affected by the presence of other customers in the system. Specifically, customer utilities depend on how many customers are in the system at the time of service as well as who these other customers are. If the service provider can price discriminate between customer classes, pricing out a class, i.e., operating an exclusive system, can sometimes be optimal and that depends only on classes' perceptions about each other. If the provider must charge a single price, an exclusive system is even more likely. We extend our analysis to a service provider who can prevent class interaction by allocating separate capacity segments to the two customer classes. Under price discrimination, allocating capacity is optimal if our measure of net appreciation between classes is negative. However, under a single-price policy, allocating capacity can be optimal even if this measure is positive. In fact, we show that the nature of asymmetry eventually determines the optimal strategy.

BIO

Vasiliki Kostami joined the faculty of LBS as an Assistant Professor at the Management Science and Operations Department in 2010 after completing her PhD in Operations Management at Marshall School of Business, USC. Her research interests mainly focus on the management of service operations. She works on the modelling of service systems, such as entertainment facilities, call centers and health care facilities under uncertainty. Specifically, she has looked at queue management problems for amusement parks such as Disneyland, quality management problems for healthcare and optimal inventory management in manufacturing sector. Her research articles have appeared in leading academic journals like M&SOM. She teaches on the full time and executive MBA programmes as well as the PhD programme.