BEHAVIOR-BASED QUALITY DISCRIMINATION

ABSTRACT: New technology enables firms to recognize customers from their purchase histories and then provide different quality levels of product features or services for repeat and new customers. Extant research has examined behavior-based price discrimination (BBP), that is, how firms set different prices for repeat and new customers. This research extends the literature by investigating behavior-based quality discrimination to reveal the unique effects of quality discrimination beyond the effects of BBP. Using a two-period game-theoretic model, we find that firms reward repeat customers on the quality dimension by offering them higher-quality product features or services than what new customers receive. Such quality discrimination dissuades competitive poaching, softens second-period price competition, and increases second-period profits. Meanwhile, firms reward new customers on the price dimension by offering them a lower price than what repeat customers pay. Therefore, firms should reward different types of customers with the right attribute (i.e., product features or services versus price). In addition, quality discrimination increases customer retention in the second period. Anticipating this outcome, forward-looking firms reduce first-period prices to compete aggressively for initial customers. This effect intensifies first-period competition and reduces first-period profits. Overall, behavior-based quality discrimination decreases firms' total profits but increases consumer surplus and social welfare.