Abstract

We recently have witnessed two important trends in online retailing: the advent of new media (e.g., social media and search engines) makes advertising affordable for small sellers, and large online retailers (e.g., Amazon and JD.com) opening their platforms to allow even direct competitors to sell on their platforms. We examine how new-media advertising affects retail platform openness. We develop a game-theoretic model in which a leading retailer, who has both valuation and awareness advantages, and a third-party seller, who sells an identical product, engage in price competition. We find that the availability of relatively low-cost advertising through new media plays a critical role in influencing the leading retailer to open its platform and to form a partnership with the third-party seller, which would be impossible when the cost of advertising is relatively high. Low-cost advertising can increase consumer surplus either directly via the third-party seller’s advertising or indirectly via the partnership on the leading retailer’s platform. We also find that the leading retailer has a greater incentive to open its platform and that the partnership is more likely to be formed when there are network effects, when the leading retailer can control the third-party seller’s exposure on its platform, or when the leading retailer can offer a direct advertising service to the third-party seller. Meanwhile, the constraints on the third-party seller’s advertising budget can reduce the leading retailer’s incentive to open its platform, making the partnership less likely. Our analysis offers important insights into the underlying economic incentives that help explain the emerging open retail platform trend in the era of new-media advertising.

Keywords: Platform openness, new-media advertising, online retailing, price competition, analytical modeling