Abstract

Understanding the degree of cannibalization and competition in online and offline markets is important to firms’ product line designs. However, few empirical studies have measured both effects simultaneously or have examined the factors that determine the extent of cannibalization and competition. In this study, we develop an empirical model to identify cannibalization and competition effects simultaneously in different markets, and further examine the impacts of consumer preferences on these two effects in a single integrated framework. Using data from the U.S. personal computer (PC) industry, we find that the online market exhibits stronger cannibalization and competition than the offline market. Both effects are significantly influenced by consumers’ search behavior and brand preference. Specifically, more active consumer search not only intensifies inter-brand competition but also amplifies intra-brand cannibalization. In addition, search has a higher impact on cannibalization than competition. Stronger consumer brand preference mitigates inter-brand competition, but its effect on intra-brand cannibalization varies for different consumer segments. In markets consisting of more high-end consumers, the intra-brand cannibalization increases with consumer brand preference, while, in contrast, in markets consisting of more low-end consumers, the intra-brand cannibalization decreases with consumer brand preference. The differences in consumer search and brand preference explain a significant fraction of the variations in both cannibalization and competition between different PC markets.

Keywords: Cannibalization, competition, brand preference, consumer search