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Author: Yuxin Chen - Chakravarthi Narasimhan - Z. John Zhang

e-mail: MktgSci@notes.cba.ufl.edu

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Individual Marketing with Imperfect Targetability

Yuxin Chen • Chakravarthi Narasimhan • Z. John Zhang
The Leonard N. Stern School of Business, New York University, New York, New York
John M. Olin School of Business, Washington University, St. Louis, Missouri
Graduate School of Business, Columbia University, New York, New York,
zz25@columbia.edu

Abstract
Our research investigates the competitive ramifications of individual marketing and information management in today’s information-intensive marketing environments. The specific managerial issues we address are as follows. First, what kinds of incentive environments do competing firms face when they can only target individual customers imperfectly? Second, does the improvement in an industry’s targetability intensify price competition in the industry such that all competing firms become worse off? Third, should a firm share its customer knowledge so as to improve its rival’s targetability? Fourth, how should an information vendor sell its information that can improve a firm’s targetability? Finally, do competing firms have the same incentives to invest in their own targetability?

To answer those questions, we develop a simple model à la Narasimhan (1988), in which each of the two competing firms have their own loyal customers and compete for common switchers. We assume that each firm can classify its own loyal customers and switchers correctly only with a less-than-perfect probability. This means that each firm’s perceived customer segmentation differs from the actual customer segmentation. Based on their perceived reality, these two competing firms engage in price competition. As an extension, we also allow the competing firms to make their investment decisions to acquire targetability.

We show that when individual marketing is feasible, but imperfect, improvements in targetability by either or both competing firms can lead to win-win competition for both even if both players behave noncooperatively and the market does not expand. Win-win competition results from the fact that as a firm becomes better at distinguishing its price-insensitive loyal customers from the switchers, it is motivated to charge a higher price to the former. However, due to imperfect targetability, each firm mistakenly perceives some price-sensitive switchers as price-insensitive loyal customers and charges them all a higher price. These misperceptions thus allow its competitors to acquire those mistargeted customers without lowering their prices and, hence, reduce the rival firm’s incentive to cut prices. This effect softens price competition in the market and qualitatively changes the incentive environment for competing firms engaged in individual marketing. A ‘‘prisoner’s dilemma’’ occurs only when targetability in a market reaches a sufficiently high level.

This win-win perspective on individual marketing has many managerial implications. First, we show that superior knowledge of individual customers can be a competitive advantage. However, this does not mean that a firm should always protect its customer information from its competitors. To the contrary, we find that competing firms can all benefit from exchanging individual customer information with each other at the nascent stage of individual marketing, when firms’ targetability is low. Indeed, under certain circumstances, a firm may even find it profitable to give away this information unilaterally. However, as individual marketing matures (as firms’ targetability becomes sufficiently high), further improvements in targetability will intensify price competition and lead to prisoner’s dilemma. Therefore, it is not only prudent politics but also a business imperative for an industry to seize the initiative on the issue of protecting customer privacy so as to ensure win-win competition in the industry.

Second, we show that the firm with a larger number of loyal customers tends to invest more in targetability when the cost of acquiring targetability is high. However, the firm with a smaller loyal base can, through information investment, acquire a higher level of targetability than the firm with a larger loyal base as long as the cost of acquiring targetability is not too high. As the cost further decreases, competing firms will all have more incentives to increase their investments in targetability until they achieve the highest feasible level.

Third, an information vendor should make its information available nonexclusively (exclusively) when its information is associated with a low (high) level of targetability. When the vendor does sell its information exclusively, it should target a firm with a small loyal following if it can impart a high level of targetability to that firm.

Finally, our analysis shows that an information-intensive environment does not doom small firms. In fact, individual marketing may provide a good opportunity for a small firm to leapfrog a large firm. The key to leapfrogging is a high level of targetability or customer knowledge.

(One-to-One Marketing; Information Strategy; Price Discrimination)