PRICE DISCRIMINATION IN A LIFETIME VALUE FRAMEWORK:
WHEN IS CUSTOMER LIFETIME VALUE MAXIMIZATION AN
OPTIMAL STRATEGY?

Julián Villanueva
Pradeep Bhardwaj

October 2007

Abstract

Both game theory and relationship-marketing literature suggest that firms should set
different prices for their existing versus their new customers. In addition, these prices can
be set to maximize short-term profits or customer lifetime value (CLV). We develop a
two-period analytical model of behavior-based price discrimination in which consumers
are heterogeneous in their switching costs and in which long-life customers could be
more (less) valuable than first-time customers. The results show that firms face two
opposing forces when setting equilibrium prices. On the one hand, loyal customers
have higher switching costs; therefore firms are motivated to charge them a higher price
than to first-time customers. On the other hand, when loyal customers are more profitable
than first-time customers, they are more costly to lose due to overcharging. We also find
that depending on the specification of the profits derived from long-life customers, a
short-term profit maximization strategy could be more desirable for both firms than a
CLV maximization strategy.