

THE FIRST FEW YEARS OF NEW PRODUCT DIFFUSION: THE ROLE OF PRICE DEPRECIATION IN BUILDING MOMENTUM

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ABSTRACT

This paper calculates the effect of introductory price and the rate of price depreciation on the adoption rates of new products in their early stages. Using a cross section data on twelve consumer electronics products, a logistic model of household adoption is estimated for the first five and the first seven years of diffusion. Intuitively, one can expect that, other things being equal, higher introductory price should be associated with lower household adoption rate. Likewise, steeper price depreciation should result in more widespread adoption of a new product in a given period of time. However, quantitative evaluation of these two effects is not well documented in marketing literature. This paper attempts to fill this void by offering an empirical model by which consumer electronics manufacturers can evaluate the expected gain in consumer acceptance of a good attainable through price erosion over time and lower introductory price. The results from this study indicate that the price depreciation and initial price both are statistically significant predictors of household adoption rates and explains over 70% of the variation in diffusion rates. Model for the first seven year period displays a better fit—explaining over 86% of the variation in diffusion rates.