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## **Pricing Strategy for Price-Quality Differentiated Products under the Bass Diffusion Model**

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### **Abstract:**

Bass Diffusion Model (BDM), one of the most successful and widely used models in marketing research, is used to forecast the adoption of new products and technologies. It was developed by Frank Bass in 1969 and is broadly used in marketing to understand how new products spread through a population. Bass distinguishes between two categories of new product adopters: Innovators, who independently decide to adopt new products without considering the actions of others within a social network, and Imitators, whose decision to adopt new products is influenced by how many others in the social network have already adopted them. For instance, when Apple introduced the





iPhone, the initial marketing targeted tech enthusiasts and early adopters (innovators). Over time, as more people adopted the iPhone, the influence of existing users (imitators) increased, leading to widespread adoption. Apple used mass marketing and product announcements to drive initial interest and relied on social proof and customer satisfaction to fuel continued growth. Therefore, the firm should focus on mass marketing and advertising campaigns to reach a broad audience, and the marketing promotion and pricing strategy should target innovators. At the same time, later efforts can leverage word-of-mouth effects among imitators.

In a homogeneous market, customers are assumed to have similar characteristics, while in a heterogeneous market, customers have diverse characteristics and respond differently to marketing efforts. For instance, the adoption of electric vehicles varies widely across different customer segments. Early adopters might include environmentally conscious consumers and tech enthusiasts. To target these segments, companies like Tesla used a mix of high-end features and a strong environmental message. Later adopters might include cost-conscious consumers, for whom companies can highlight the long-term savings and government incentives. Marketing strategies are tailored to each segment's unique preferences and concerns. Therefore, customized marketing strategies for each segment are necessary. This might include targeted advertising, personalized messaging, and differentiated product offerings. Monitoring customer feedback and behavior is needed to refine the model and marketing strategies. For both types of customers, the BDM is a powerful tool for understanding and forecasting product adoption in both homogeneous and heterogeneous markets. By





estimating the innovation and imitation parameters and tailoring marketing strategies to different customer segments, companies can effectively manage introducing and expanding new products.

**Keywords:** *Bass Diffusion Model (BDM), new product pricing, product quality*