

# **Designing Pricing Strategy under Environmental-Friendly Promotion and Competition**

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## **Abstract**

In recent times, there is a rising interest among firms to invest in the ‘environmental-friendly promotion’ of their eco-friendly products. Promotions of Patagonia, Diesel Clothing, and so on demonstrate this phenomenon. A group of experts believes that environmental-friendly facilitates a firm to achieve better profitability compared to that under conventional promotion. On the contrary, there exists a sceptical attitude toward the effectiveness of environmental-friendly promotion. Our exploration of existing articles indicates that there is an absence of analytical works focussing on the effect of environmental-friendly promotion on a firm’s pricing decision and profitability. Here, we propose a Hotelling model-based methodology to design a firm’s pricing strategy under conventional promotion, environmental-friendly promotion, consumer’s green sensitiveness, and product differentiation in a duopoly market considering both competition and collaboration among the firms. Under different scenarios, we determine optimal equilibrium promotion intensity, price, and profit. We perform a rigorous numerical analysis to facilitate the graphical depiction of the insights. We also demonstrate the impact of product differentiation, consumer’s green sensitiveness, and cost of promotion on the decision variables. Finally, we propose a framework to facilitate managerial decision making to select the appropriate promotion strategy.

## **Keywords**

Green Promotion, Pricing Strategy, Competition, Collaboration, Hotelling Model

## **Biographies**

**Sumanta Basu** is an Associate Professor in the Operations Management Group at the Indian Institute of Management Calcutta, India. Prior to joining the Indian Institute of Management Calcutta, he was a member of the faculty at the XLRI School of Management, Jamshedpur and has also worked for the industry in product development and optimization domain. His research interests include pricing, healthcare operations, and combinatorial optimization. His research has appeared in *Omega: The International Journal of Management Science*, *Journal of Revenue and Pricing Management*, *INFOR: Information Systems and Operational Research*, etc.

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such as *Informations Transactions on Education*, *INFOR: Information Systems and Operational Research*, etc. His research interest includes supply chain coordination, supply chain network design, facility layout design, risk management, green supply chain, pricing strategies, etc.