

Abstract

One of the distinct features of consumerism in today's world is the plethora of choices facing the consumer. Product differentiation is used by most sellers as a tool to create 'niches' in market, which allows them to avoid fierce competition from other sellers in the similar product-market space. However, increasing product differentiation not only implies greater variety of products for customers, but also shortens the life of the product varieties themselves as close substitutes emerge, leading to cannibalisation. Price discrimination is often an important tool used by sellers for segregating customers between the profitable customers and the not so profitable ones.

Self-Selection mechanisms, where feasible, allow the seller to price discriminate in a way, which reveals each customer's underlying 'type' (in terms of her preference parameters) and thus may allow the seller to target his varieties better to respective 'types' of customers. Although extant literature is quite abundant in problems related to vertical differentiation using self-selection as a tool, such applications in problems of horizontal differentiation are quite rare.

In this research work, we investigate the consumers' choice of pack size with respect to their individual Holding and Transaction Costs. The consumer faces an uncertain consumption (because of a stochastic nature of consumption) and the seller offers a set of packs targeted towards different types of customers with his knowledge of the customer types and their respective holding and transaction cost parameters. The model investigates the optimal pack sizes (from the seller's point of view) as well as the optimal pricing strategies for the seller (quantity discounts or premiums) for specific packs depending upon these consumer choice parameters.

KEY WORDS:

Pack Size; Horizontal Differentiation; Quantity Uncertainty; Consumer Utility; Expected Utility; Quantity Surcharges