
ELASTICITY OF DEMAND IN PRICING STRATEGIES: CASE STUDIES ACROSS VARIOUS INDUSTRIES

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ABSTRACT

Elasticity of demand is the most important tool used in economics to demonstrate how quantity demanded changes when income, price and other such factors are varied. This in turn helps firms to understand consumer needs and come up with appropriate pricing strategies. In addition, it also highlights the responsiveness of demand due to change in prices for a product or service. Elasticity prediction of market trends determines pricing levels that maximize revenues. It varies from one market setting to another but mainly as a result of competition, availability of substitutes or their lack thereof and customer incomes among others. It is essential therefore to have separate pricing methods directed at unique segments such as market-penetration strategy, skimming strategy and psychological pricing among others based on the characteristics each segment or particular group of buyers possess. For example, this study will delve into various instances drawn from retailing industries namely automobile companies' technology firms like Apple Inc., services industry such as hotel business and car manufacturing sector showing how prices have changed due to changing elasticities. In essence elasticity should be considered when coming up with optimal prices or choosing whether revenue management tools should be adopted (Braeutigam & Daughety 2013). Thus businesses can leverage on their knowledge about elasticity in order to maintain competitiveness while increasing revenues even amid highly unpredictable environments.

Keywords: Elasticity, Demand, Strategies, Segments, Industries, Market, Pricing

INTRODUCTION

The underlying assumption that consumer behavior has been built upon traditionally comes from an economic perspective that describes “elasticity” with reference to different elements affecting firm profitability through an appropriate cost structure geared towards enhancing its product being offered herein above (Braeutigam & Daughety 2013). Price elasticity measures how much quantity demanded changes if there is price change. Consequently companies producing goods and services use PED as a means of optimizing revenue by establishing whether they have elastic or inelastic market demand thus guiding them regarding their pricing strategies. Knowing elasticity allows organizations predict future shifts within markets while maintaining equal rates of profit maximization. These factors include availability of substitutes, customer incomes and level of marketing rivalry. When several substitute products are available, the customers’ income levels are low or there is intense competition then a high elasticity level exists for the price. Different strategies like market penetration pricing, skimming pricing strategy and psychological pricing serve various markets and customers. This can be seen from case studies in retail; technology; hospitality; automotive sectors which show how prices were altered in response to changing elasticities. Price decisions consider elasticity for example when selecting optimum values for the price or implementing revenue management methods therefore firms must always put it at the back of their minds whenever they want to successfully set up their business models. Thus by understanding elasticity insights firms can improve their competitive advantage, capture greater revenues and sustain growth within a dynamic business landscape.

NEED FOR THE STUDY

In today’s turbulent business environment business firms must have a clear understanding of demands elasticities as well as price strategy (Kotler et al., 2013). Businesses need to know their clients’ sensitivity to product’s prices changes among other things since markets are changing rapidly due to shifts in customers’ preferences (Baltzan & Phillips).

Accordingly, there exist opportunities for deeper investigation into consumer behaviour and market dynamics improved by increased availability of data and sophisticated analytical tools. Organizations should invest in understanding demand elasticity and pricing strategies if they want to keep themselves ahead of competition and maximize profits.

Again, companies have to study demand elasticity as well as pricing strategies in order to gain a competitive advantage since they face intense market competition both locally and internationally. This enables them come up with right prices that satisfy their customers' requirements while at the same time keeping up with the ever changing market patterns. Therefore, considering the complexity of modern market structures, studying demand elasticity and pricing models is inevitable for any business entity wishing to succeed.

SCOPE AND LIMITATIONS OF THE STUDY

This study is to see how demand elasticity and pricing strategies vary across industries such as retail, technology, hospitality, automotive among others. The text provides a comprehensive analysis of demand elasticity, including its definition, types, determinants, and significance in pricing decisions. Furthermore, the study discusses pricing techniques with regard to manager-related problems, such as penetration pricing, skimming pricing, premium pricing, psychological pricing, bundle pricing, and dynamic pricing.

There are, however, certain restrictions on the study's purview. It might not exhaust all aspects related to elasticity of demand and pricing strategies because the subject is vast and complex. Additionally it may not capture real-life intricacies concerning businesses' adoption of prices in marketing through its focus on theoretical underpinnings as well as case studies.

The provided examples are illustrative cases picked from different sectors that might not present all the challenges experienced by businesses in diverse markets. Also generalization cannot be made on the findings derived from these case studies since they depend on contextual factors.

Further still market forces such as consumer tastes and competitive landscapes are dynamic hence making the saleability of price mechanisms to change with time. Though this research offers insight into current concepts on elasticity and their application; more developments are likely to come up in future.

To sum up though this research aims at providing a complete overview of demand elasticity along with pricing rules yet it recognizes certain shortcomings characterized within its boundaries. Therefore additional research could be directed towards specific industries or emerging trends on price determination for improved comprehension in this domain.

REVIEW OF LITERATURE

- **FASTER CAPITAL**

DATED- 17TH DECEMBER,2023 (UPDATED)

This report dealt with the examples of price elasticity in different industries as well as real world examples of price elasticity. It also provides information to satisfy the individual's needs and achieve the objectives.

- **SYMSON**

This report provides the information about the factors affecting price elasticity of demand and its features.

- **REVIONICS an aptos company**

BY- MATTHEW PAVICH, (Sr. Director, Strategy & Innovation)

DATED- JUNE 24

This site or report provides the basic and the introduction/definition about the elasticity of demand and using elasticity for pricing decisions.

- **MASTER'S THESIS RESEACH PAPER**

BY- KENNETH AHLBERG

DATED- JANUARY 2005

From here we have taken the basic information about the strategies, consumer behavior, elasticity, pricing decisions, etc.

- **BDC**

It tells about the implications for managers and decision makers in pricing.

- **PADDLE**

It provides the information about the pricing strategy optimization.

- **ICMR IBS center for management research**

This report provides the information about the case studies across various industries.

OBJECTIVES OF THE STUDY

- 1. To Understand Consumer Behavior:** This study primarily aims at understanding consumers' reaction towards price changes, income variation among other elements influencing motivation. Researchers will try analyzing elasticity of demand so that they could understand characteristics such as taste preference or pattern purchasing with regards to sensitivity due different factors such as charges variability.
- 2. To Develop Effective Pricing Strategies:** Another goal is developing effective pricing strategies that would lead to maximum revenues and profitability levels within a given brand or company context. Understanding the concept behind the law helps firms identify optimal prices, distinguish customers who may have potential low purchasing power from those capable buying products at any price thus coming up with superior pricing mechanisms for each customer group maximizing overall value.
- 3. High Competitive Advantage Enhancement:** The research's main goal is to ensure that businesses are competitive in the market by enabling them to project and react on time to changes in consumer demand and market conditions. This will enable firms' price elasticity decisions increase their income when opportunities arise and also reduce the risks associated with such decisions.
- 4. It is all about Revenue Management Optimization:** Lastly, this pertains to revenue optimization using the elasticity principles explained above. The overall demand can remain unchanged if companies embrace dynamic pricing strategies that adjust for shifts in consumers' purchasing powers hence realized better profitability.

In sum, through these research objectives it will help enterprises make informed choices on pricing and revenue management resulting into improved competitiveness as well as financial performance.

RESEARCH METHADODOLOGY

The two sorts of data that can be subdivided into them are as follows:

- Primary levels
- secondary levels

Primary data is gathered physically by moving from location to location while collecting samples relevant to the study. On the other hand, the information provided in this research paper would be labelled as secondary data because the information was gathered from various articles, books, websites, and specific other research papers.

ANALYSIS & FINDINGS

I. INTRODUCTION TO ELASTICITY OF DEMAND AND PRICING STRATEGIES

The elasticity of demand is a concept in economics which indicates how much quantity demanded for a product changes with its price change. It is on this simple economics principle that firms base their comprehension of consumer behavior and establish appropriate pricing mechanisms. Price elasticity of demand is one of the various types of elasticities and it shows how much a demand can be changed by price changes.

One can calculate the Price Elasticity of Demand (PED) by dividing the percentage change in quantity demanded with the percentage shift in price. When this number is more than 1 it implies that demand for goods is elastic implying that consumers are more sensitive to changes in the prices. Conversely, if it less than 1 it shows that from one period to another product demand tends to be less affected by changes in prices.

Understanding elasticity of demand properly enables businesses to set revenue optimizing prices. Some commodities may possess elastic attributes henceforth; decline in their costs would enhance their sales leading to increased incomes. Conversely, where goods are inelastic, variation in terms of pricing may not result into any significant alteration within supply or vice versa. Once they assess elasticity closely, organizations can design pricing approaches

matching what a consumer likes along with changes taking place within markets which are always changing and sometimes hard to predict.

II. CONCEPTUAL FRAMEWORK: UNDERSTANDING DEMAND ELASTICITY

Substantially, individual's sense of economics is not complete without considering elasticity of demand that measures how sensitive the quantities asked for are in relation to the variation in prices and other production-influencing factors such as income. Stakeholders such as businesses, policy makers and consumers must understand elasticity because it helps them predict how market behaviours will change when these factors do change.

1. Definition:

- Elasticity measures the percentage change in quantity demanded resulting from a one percent change in price (price), income (income), or other determinants (cross-price).
- Mathematically, it is expressed as;

$$Ed = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}$$

2. Factors That Affect Price Elasticity of Demand:

- **Substitutability:**

The more interchangeable items consumers have for their money, then the higher amount they spend on cheaper alternatives or cheaper substitutes and lower spending on expensive ones and thus lead to lower demands hence low prices falls therefore ceteris paribus. For instance, consider coffee and tea lovers who do not prefer any of them over each other; when coffee becomes expensive then people will switch into tea making that particular market's coffee demand curve shift leftwards because tea can be taken as a substitute beverage for coffee too among many others such as coca cola.

- **Urgency:**

Purchases that are more luxury oriented will have more price elastic demand. In other words, the product has a greater elasticity.

Say you are thinking of getting yourself a new washing machine but the old one still works – it is just outdated. You may choose not to make the purchase right away if prices rise because eventually they will go down or your current machine will break down.

The less discretionary the product, the less quantity demanded falls. For instance; inelastic examples could be luxury products bought merely for their names while others are addictive commodities as well as mandatory accessories like inkjet printer cartridges. They all have one thing in common; no substitutes exist for these products. If you want an iPad, you won't buy a Kindle Fire. Also, addicts do not mind high prices and HP printers only work with HP ink (unless HP cartridge protection is disabled).

- **Length of Currency Price Change:**

It can also depend on how long the price change lasts. There is different level of responsiveness in demand when there is a one-day sales event compared to a price alteration where it holds for a season or even a year's period.

A clear outline of time dependency is essential when examining PED so that consumers can also compare with other goods. Changing strategies seems harsher than accepting seasonal variations in costs by many shoppers who would rather stick to their normal routines instead of changing them over time.

3. Types of Elasticity:

- **Price Elasticity of Demand (PED)-** Any alteration in the price of a product, whether it may be reduction or increase, has an effect on the quantity demanded for that item.

- **Income Elasticity of Demand (YED)-** YED stands for Income Elasticity of Demand which is also referred to as income elasticity of demand. It is a measure of responsiveness of quantity demanded for a particular commodity to consumers' change of real income (income received after adjustment for inflation) holding other things constant.
- **Cross Elasticity of Demand-** Also known as XED, Cross Elasticity of Demand measures how sensitive the quantity demanded for one good (X) is to changes in the price of another good (Y), hence sometimes referred to as Cross-Price Elasticity of Demand.

III. TYPES OF PRICING STRATEGIES

There are around 10+ types of pricing strategies, here are few types that were written in brief;

1. Dynamic Pricing

Dynamic pricing is situational, it changes according to consumer demand. Also known as demand-based pricing, this method is used when product prices fluctuate daily or even hourly. Hotels, airlines, and event locations adjust their prices daily using this approach in order to maximize profits.

2. Economy Pricing

This strategy entails charging a bit lower than competitors because customers would like to buy more at a time at reasonable price. This kind of pricing policy typically goes hand in hand with low manufacturing costs. It is commonly applied to commodity goods and practiced by companies such as Walmart and Costco.

3. Price Skimming

When companies charge the highest prices for new products and they gradually reduce them over time, it is price skimming. Prices tend to fall in this type of pricing strategy as products move towards obsolescence. This is why price skimming is common among companies that deal with high-technology and novelty products.

4. High-Low Pricing

High-low pricing is a variation of or similar to skim-off approach; nevertheless the reduction in price does not occur uniformly. With the high low method, there is a substantial single drop in the cost of a product other than gradual decrease. A high-low strategy is commonly used by retail businesses dealing with seasonal merchandise which are sometimes promoted so as to clear stock which cannot be sold after some time.

IV. CASE STUDIES ACROSS VARIOUS INDUSTRIES

1. Retail Industry:

Analysis of Pricing Elasticity between Online Retail vs Brick-and-Mortar Stores:

Accordingly, researchers consider how price fluctuations affect consumer demands for goods both online and offline. They examine sales volumes, price changes and customer preferences before determining how responsive demand is to price changes. Retailers with knowledge about pricing elasticity use it in making decision on pricing strategies, promotions and inventory control.

Case Study: Pricing Strategy By Amazon And Its Impact On Demand Elasticity:

On this note, Amazon uses dynamic pricing algorithms which are powered by big data analytics technology because competitive pricing method has become prevalent among many online retailers (Bhargava 2015). As a result analysts have been able to identify customer behaviour patterns that correspond with certain market fluctuations within a given period such as peak shopping season where they find out that elasticities tend to behave differently from other periods when the same company experiences normal adjustment.

2. Technology Industry:

Elasticity of Demand in the Smartphone Market; Apple Vs Androids:

This study examines how consumers react to price alterations for smartphones produced by either Apple or running on Android operating system. To evaluate how customers perceive a brand's value relative to its price, researchers may carry out surveys, analyze

sales figures, and monitor market trends. For every product brand loyalty, perceived quality and ecosystem integration among others determine the extent of elasticity of demand.

Case Study: Pricing Strategies of SaaS Companies:

Since these companies sell their services on a subscription basis, they can use different pricing strategies. It is about factors such as feature differentiation, target market segmentation, pricing tiers which could help understand how prices are adjusted by these firms in order to optimize revenue and number of customers acquired. SaaS companies refining their pricing elasticities can better accommodate customer preferences or market demands.

3. Hospitality Industry:

Pricing Elasticity in the Hotel Industry; Luxury Vs Budget Accommodations:

Luxury hotels mainly target high-class persons who value premium amenities and personalized services compared to budget accommodations whose primary customers are price-conscious travelers looking for basic facilities at lower cost (Kwiatkowski et al., 2016). Therefore historical booking data analysis of seasonal trends and competitor's pricing can help hotel operators understand how changes in room rates would impact occupancy levels and revenues realized from both luxury and budget segments.

Case Study: Dynamic Pricing Models In The Airline Industry:

Airline fares fluctuate depending on airline dynamics such as demand fluctuation for seats, availability status and booking pattern thanks to dynamic ticket pricing algorithms deployed by most airlines (Talluri & Van Ryzin 2004). Thus studying dynamic pricing models will provide insight into how demand elasticity influences pricing decisions as well as revenue management strategies within an extremely competitive aviation industry.

4. Automotive Industry:

Pricing Elasticity of Demand for Electric vs. Conventional Vehicles:

Electric cars uptake depends on infrastructural accessibility, customer preferences and government incentives. Researchers have conducted countless studies on price elasticity to evaluate the impact of price changes on consumer demand for EVs vis-a-vis gasoline-powered conventional cars. Environmental regulation and battery technology advancement can affect the elasticity of demand for electric vehicles.

Case Study: Pricing Strategies of Luxury Automobile Brands:

Luxury car manufacturers present their products as symbols for prestige, status and craftsmanship. Pricing strategies regarding luxury automobiles often entail setting premium prices to maintain brand exclusivity as well as claimed value. Researcher's study customer behavior, marketing trends among other things like competitor pricing so that they can understand the influence of elasticity of demand on quantities sold

In the luxury automotive segment.

V. FACTORS INFLUENCING ELASTICITY OF DEMAND IN PRICING STRATEGIES

1. Substitute Availability

If substitutes can be replaced with other goods that are similar in the eyes of consumers, then the price elasticity of demand will be considered elastic. Good demand is inelastic if a good cannot be substituted for.

2. If necessary or luxury good

The price elasticity of demand is lower when the good is something needed by the consumer like Insulin. When it comes to luxury goods, the price elasticity of demand tends to rise.

3. The proportion of income spent on a good

Spending on a product accounts for only a small fraction of their total earnings and this results in low price elasticity of demand. Thus, changes in prices have little effect on customers' desire to buy these products. On the contrary, such condition as large part of

one's income being taken up by purchasing a particular commodity gives more elastic type of demands.

4. The time period since last alteration in cost occurred

Over time, consumers become more elastic over longer periods because they would have identified acceptable and less expensive substitutes after the long run following an increase in prices for any given product.

VI. IMPLICATIONS FOR MANAGERS AND DECISION-MAKERS

Managers and decision-makers in business play a major role in dictating pricing decisions, optimizing pricing strategies and even implementing revenue management techniques. These are the implications it has on managers as well as decision-makers:

1. Pricing Decision-Making Process:

This means that when making such decisions the managers should consider things like customer value, production costs, competitive pricing among others.

For effective decision-making, understanding diverse pricing policies like cost-plus pricing, price skimming, penetration pricing and value-based pricing is necessary.

2. Pricing Strategy Optimization:

In other words, to optimize prices you have to analyze customer data as well as market data to find out the best price point for product or service offers. Regardless of market fluctuations or customer changes and this is why prices need optimization to maximize revenue generation by managers.

3. Revenue Management Techniques:

To implement these techniques one must understand how different price points impact on revenues in relation to various pricing strategies. Other methods include value-based pricing, price skimming, penetration costing; cost plus pricing method among others can be used to improve income streams.

This demands strategic thinking by managers and decision-makers before they make their final stance about how much a given product will cost given the competitive situation in the market today. Thus by leveraging effectively on these concepts of strategic measures a business will always remain profitable apart from being competitive with rivals in the sector.

SUGGESTIONS

Managers and decision makers can make the following suggestions on what has been discussed about elasticity of demand and pricing strategies:

1. **Market Research-** It involves a variety of methods such as in-depth interviews, surveys, competitor research and data analysis with an aim to understand market needs both for your potential and current customers.
2. **Pricing Analytics & Tools-** Pricing analytics is an approach that uses information from big data to create a “price waterfall” which sets prices based on costs, market demand and other factors. Hence, this knowledge is incorporated into your pricing to be able to fulfill the same.
3. **Introducing Dynamic Pricing Strategies-** it allows dynamic pricing strategies that uses variable prices instead of fixed ones, selling the same product at different prices to different groups of people.
4. **Segment Customers & Customize Pricing-** Product segmentation refers to giving various products by varying customer groups according to their requirements whereas price segmentation means the same product being sold at different prices among different consumers.
5. **Monitor & Adapt Pricing Strategies-** After implementing a pricing strategy aimed at undercutting competitors, it becomes crucial to keep monitoring continuously and adjust when necessary for long-term successes because market prices are never static and customer preferences change as well as economic conditions also changes thus competitive landscapes are constantly evolving making it very important. Accordingly, by evaluating your pricing strategy regularly while refining it accordingly will enable you keep ahead always thereby maintaining your competitiveness.

- 6. Invest in Price Expertise & Training-** In service industry training, whether it is cost or investment should be determined using certain criteria; for instance if there is an improvement in performance, then this amount spent during training session should be considered as return on investment made towards human capital which might have consequences in future while badly designed training having no impact must be treated as expenditure only but not investment.

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