

Pricing Analytics:

Insights Based Strategy

A comprehensive guide to Kick start product pricing analytics

▲ 3,690.47

▲ 29,140.36

▲ 19,580



What we'll be talking about:

1

Introduction

- Significance of Pricing Analytics
- Enhancing value with Pricing Analytics
- Challenges & Impact of Neglecting Pricing Analytics

2

Pricing Strategy

- 5Cs of Pricing
- Laffer's Curve
- Pricing Strategy Models
- Product Life cycle & Price strategy

3

Pricing Analytics

- Business objective
- Components of Pricing Analytics
- Theory of Pricing Analytics
- What Pricing Analytics can evaluate
- Pricing Analytics Models
- Optimization Process
- Pricing Analytics Application

The background features a dark blue and black color scheme with various financial data visualizations. On the left, there are several jagged line graphs in shades of blue and purple. In the center, a large, bright green circle contains the word 'Introduction'. To the right, there are stacks of gold and silver coins, a large white arrow pointing upwards and to the right, and a candlestick chart with numerical values. The overall aesthetic is modern and professional, representing financial growth and investment.

Introduction

Introduction

Sell low, sell more. Yet, this approach commonly undermines profitability. Managers overseeing direct-sale goods grapple with the dilemma of sacrificing potential earnings with low pricing or encountering market resistance due to high pricing.

In “Getting Pricing Right By Larry Montan, Terry Kuester, Julie Meehan”- research shows that price management initiatives can increase a company’s margins by **2 to 7% in 12 months**, yielding an ROI between **200 and 350 percent**, clearly indicating that pricing metrics are highly important.



Significance of Pricing Analytics

Do you know the key factors for purchase in this omni-channel business era is **price-tag**

Platforms like Google shopping, Trivago, Bankbazaar.com, Pronto etc. allows customers to easily compare prices of the same product across providers.

In many cases better the offer – higher the sale.

Hence, the pricing strategy within an industry can have a crucial role in enhancing revenue.

Pricing analytics utilizes predictive models to enable informed decisions on pricing strategies, **ultimately leading to increased profitability.**

Ways of increasing value with Pricing Analytics

1 KNOW THE CUSTOMERS

Organizations gain insights of their customers using diagnostic tools for identifying customer segments and past performance drivers. This approach utilizes customer data to determine ideal pricing and conduct simulations to assess customer reactions to diverse pricing strategies.

3 OPTIMIZE PRICING

Optimization tools ensure that when introducing a new product, the platform sets an ideal price, avoiding the risk of either under-pricing and depleting margins or overpricing and deterring customers.

2 UNLOCK PRICING OPPORTUNITIES

Maximize pricing gains - Analytics predicts added revenue, detects leaks, and accelerates wins.

Optimize promotions - By studying market trends and customer data, pricing analytics forecasts profitable campaigns, enhancing customer engagement and discontinuing ineffective efforts.

"Pricing is the accelerator and brake of a business. You need to define a speed limit and use inputs coming from the market to adjust how fast you want to be going."

Pricing Director, FMCG

But what are the major challenges if pricing analytics is not implemented, and its impact on the organisation?

CHALLENGES

- Balancing cost and price models considering perceived product value and competitive offerings
- Expanding product offerings to capture higher price points while maintaining revenue growth
- Finding the price for optimal profitability without losing customers to the (cheaper) competition



IMPACT

- Inconsistent pricing leads to destruction of customer loyalty
- Cannibalization/failure of existing product line resulting in decreased sales.
- Loss of market share if prices are too high and erosion of profit margins if price is too low.



Pricing Strategy

While all this sounds great in theory, but how to determine what is the best price for your product?

5Cs of Pricing

1 Cost is the most obvious element of the pricing decisions.

Should keep in mind both variable and fixed costs while deciding on the pricing of each product.

Costing like material, labour, utilities etc. should be considered before putting a price on a product.

The model below depicts your company's potential gross margin:

Potential Sale = Quantity sold × Perceived value per unit for customers

Cost of sales = Precise direct and indirect expenses related to sold products/services

Potential gross margin = Potential Sale – Cost of Sale

2 Customers are the ultimate judge as you must

determine: What is your customer's expected range — the highest and lowest price points? Within that range, what is your customer's willingness to pay? Studies reveal that **60% of customers are price-sensitive** and they can switch brands if they find better deal. E.g.- Toyota positions their cars to mid-segment customers who are price-sensitive.

3 Competition is faced by every company and product.

Leaders must determine how your competitor's prices will affect your business

E.g.- **Samsung & Apple** phones have competitive pricing

4 Channel of Distribution includes intermediaries who move products from manufacturer to end users and influence product prices to maximize their profits.

When firms use intermediaries to reach the customers, prices they set are impacted because they need to ensure their margins are large enough to motivate them. It's essential to ensure these intermediaries enhance the value between your business and customers.

E.g.- **IKEA's distribution channel** consists of the manufacturer, dealer, wholesaler, and retailer. The price strategy that IKEA utilizes must help to ensure that each member is financially satisfied while making a profit itself and keeping the price that is of value to the end user.

5 Company's Objective is the crucial aspect while

deciding on pricing as it determine how company want to get perceived by customers.

As **64% of customers** feel they can more easily create a trusting relationship with a brand that shares their values.

E.g.- **Walmart's positioning strategy s** "affordable & accessible"

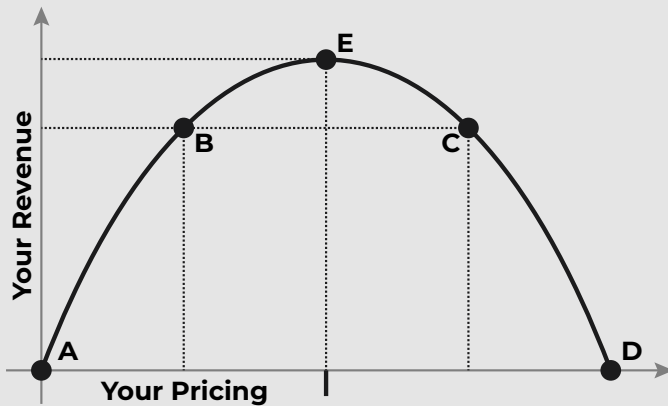


30% of global CEOs saw pricing as a strategic priority over the next six months

EY CEO Outlook Survey January 2023

Laffer Curve

What is the optimal price?



As a product company operating in a highly competitive market, setting the right pricing strategy can be challenging. Even the smallest price adjustments may lead to the loss of loyal customers who have supported your products over time.

Determine how your customer base would react to a possible increase (or decrease) in your pricing by **Laffer's Curve**

Point A – where products are given free of cost.

Point B – where products are sold at lower cost than golden ratio.

Point C – where products are sold at slightly higher cost than golden ratio.

Point D – where pricing is so high that no one will buy the product

Point E – Sweet point where both product and pricing are efficient, and companies can generate maximum revenue

Applicability of Laffer Curve

Laffer Curve concept may not directly apply to every industry and brand. Some industries might have more flexibility in pricing due to **demand elasticity**, while others might be constrained by **market dynamics or competition**.

Additionally, businesses with **strong brand recognition** might have more leeway in setting higher prices just like Apple, BMW, Gucci etc.

The Laffer Curve concept provides a **broader perspective on pricing dynamics**, but its applicability depends on industry specifics and competitive factors.

Blend of two!

While the 5Cs guide us in understanding the intricate balance between **value and profit** which helps in deciding the pricing of a product

Now, let's look at the Laffer Curve which unveils the **power of optimal pricing**, showcasing how both under-pricing and over-pricing can lead to diminishing returns.

By blending these two concepts, we harmonize market understanding, costs, and strategy, crafting a path to smart pricing choices.

Which pricing strategy to adopt?

Imagine pricing without a pricing strategy resembles **a ship without a compass—directionless.**

After deciding on the optimum pricing for your product, finding the right pricing strategy is crucial & can be difficult. Let's explore various strategies to gain clarity on the matter.

1 Cost plus Pricing – $\text{Cost} + \text{Markup}(\%) = \text{Price}$

This pricing model adds a percentage profit as a line item on cost. This model causes prices to fluctuate basis input costs. Doesn't account market factors like competition & demand

2 Competitive Pricing

- Economy Pricing – Price slightly lower than competitors to target price sensitive customers. E.g.- Walmart, Maruti.
- Premium Pricing – Price higher than competitors to target quality sensitive customers. E.g.- Apple, Dyson, BMW etc.

3 Skimming Pricing

Initially setting a high price and gradually lowering it over time to target different customer segments. This strategy can work well for products with varying life cycle lengths

E.g.- Apple reduced the price of the iPhone following the release of the Samsung Galaxy.

4 Penetration/ Freemium Pricing

Setting a relatively low or no cost price to gain a large market share quickly, often used for new products or market entry.

E.g.- Campa, acquired by Reliance Grp. launched carbonated drinks at half price of Coca-Cola, Pepsi

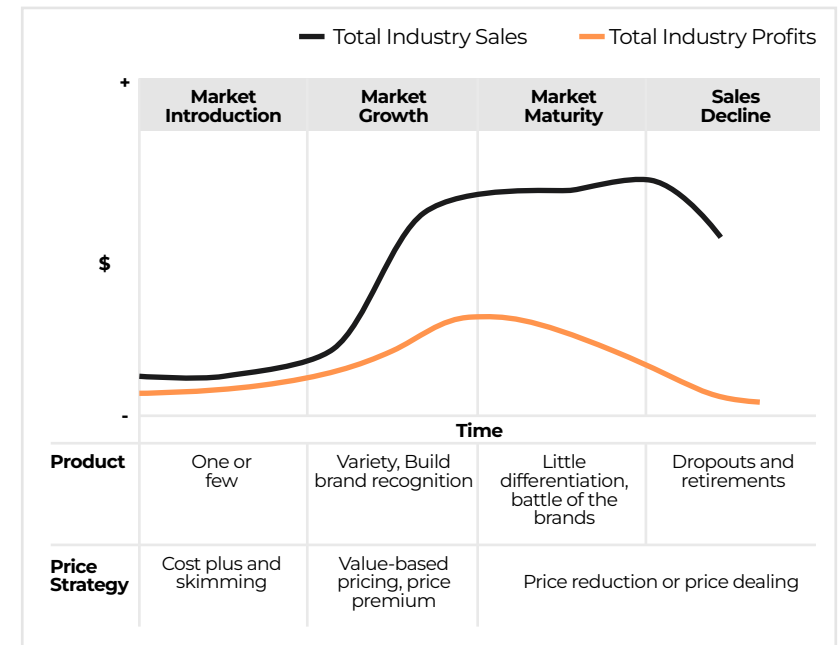
5 Dynamic Pricing

Adjusting prices in real-time based on demand, customer behaviour, or market conditions.

E.g.- Amazon changes their product prices on average every 10 minutes.

Product Life Cycle X Price Strategy

There are distinct pricing strategies at each stage, reflecting the decision-making process of “maintain, refresh or retire” as a product matures toward the end of its life.



Source: Gartner

By using this approach, companies can optimize tactics dynamically to maximize profitability at each stage.

After deciding on the right pricing strategy for your product brand, let's dive into the **Analytics - Game Changing tool!**



Pricing Analytics

Pricing Analytics – where it all comes together!

Advanced analytics aimed at customer and business outcomes are at the core of modern pricing and profitability management, price leveraging, and trade spend effectiveness.

Analytics can lead the way on pricing and customer profitability

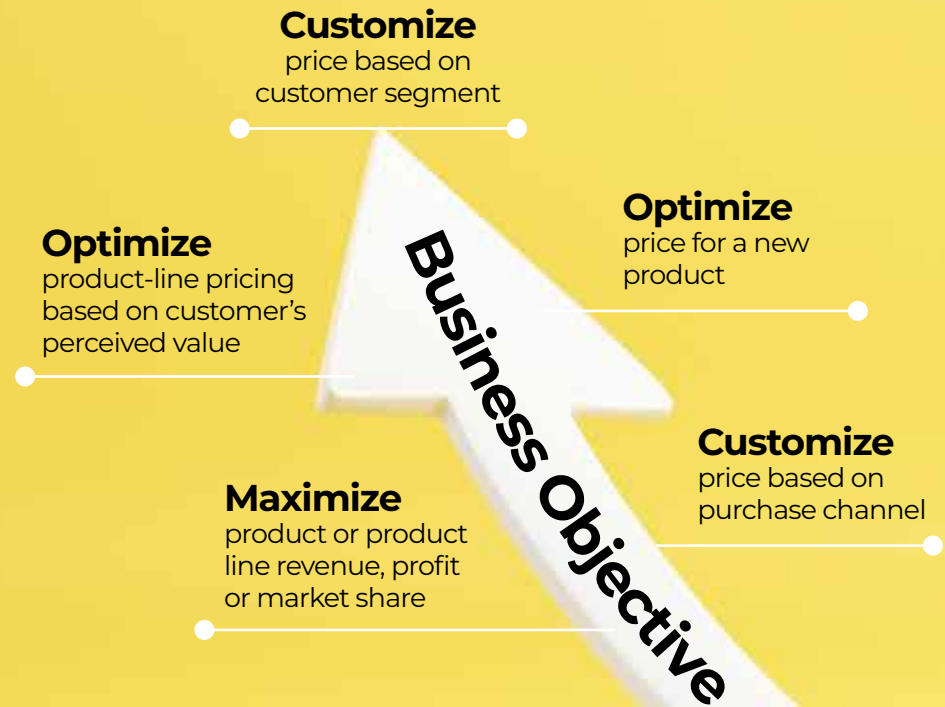
Facing growing complexity and a multi-channel business environment, companies need to be able to answer fundamental business questions— such as:

- Who is my most profitable customer?
- What is my most profitable product or region?

Combine pricing with analytics, and you can create a mechanism that functions as both a catalyst and a metrics engine for managing profitability. Pricing analytics can also help executives more clearly understand both the internal and external factors affecting profitability at a granular level.

Components of Pricing Analytics

- **Dynamic Pricing** Helps adjusting real-time price based on crucial business factors (competition, goals) & uses data-driven simulations to forecast the impact of different pricing scenarios
- **Promotion Optimization** Maximizes customer-centric promotions for profitability through demand modeling, optimizing pricing, and ad placement to capture a larger market share.
- **Pricing for Future Offerings** Enables product exploration with consumer trade-off techniques like Choice-Based Conjoint, Brand Price Trade Off (BPTO), and Price Sensitivity Measure (PSM).



95%

EY study shows that **95% of high-growth B2B companies** using advanced pricing strategies and increasing prices by **5%+ in 2022 achieved over 5% growth.**

1. Dynamic Pricing

Look at each of the different components of pricing analytics that can change the game to make informed pricing decisions

For an organisation with "differentiated Products in various segments" a Value pricing strategy is suggested.

It starts with Mapping Customers buying factors-

- Value of the end product that customer makes
- Value of trusted Vendor
- Readiness to Switch supplier

these factors are quantified and Algorithms segment them into groups.

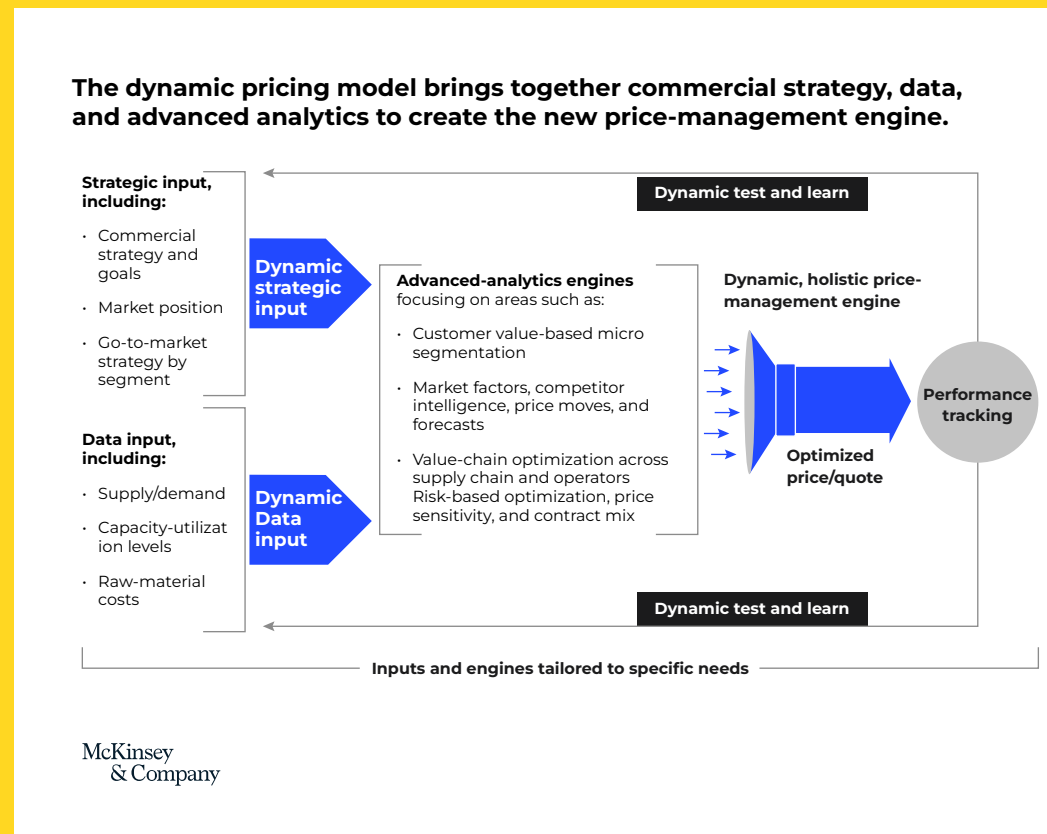
"Next best alternative" Pricing can be implemented for Large customer accounts.

With the help of advance analytics, it can be extended to include smaller customers as well.

As a part of **dynamic pricing**, companies can leverage market intelligence. Forecasting market demand and supply can further improve pricing strategies.

For industries like aviation, chemical and logistics; forecasting oil prices in advance can help in hedging their bets and prepare in advance.

McKinsey has proposed a model in which dynamic pricing brings together commercial strategy, data and advance analytics to create the new price-management engine. (Refer to the image)



McKinsey study reveals that a price rise of 1%, if volumes remained stable, would generate an 8% increase in operating profits

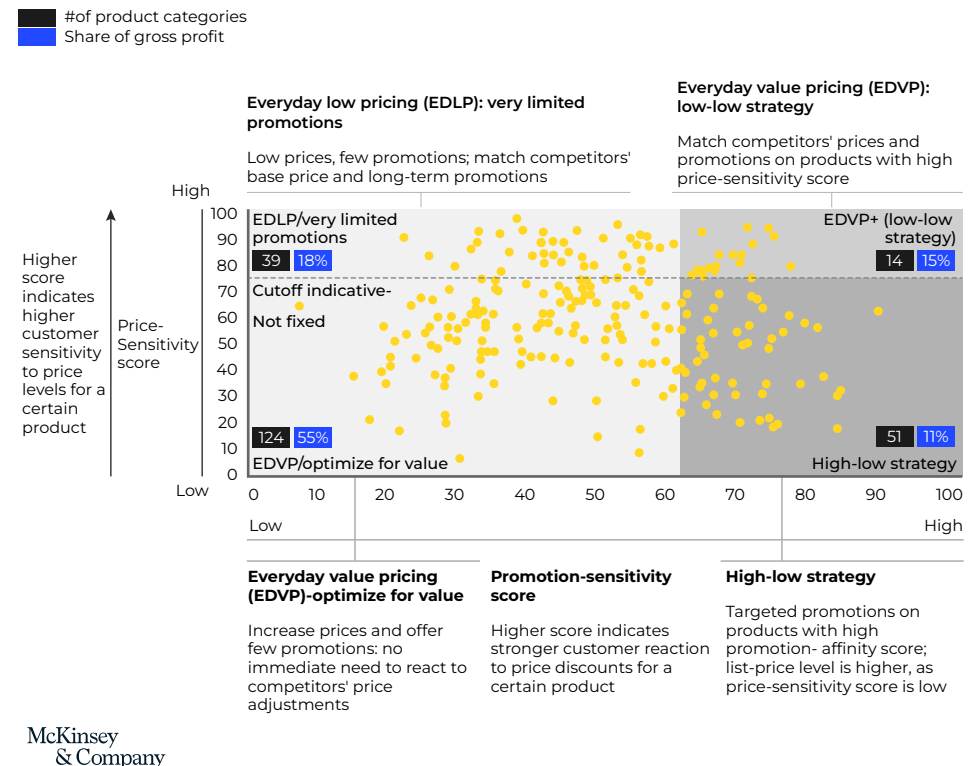
2. Promotion Optimization

To enhance pricing and promotional choices, businesses should merge these scores within a price-promotion matrix. This allows for pinpointing an ideal balance for each product. Consequently, products are classified into distinct quadrants within the matrix:

<p>High price sensitivity & low promotion affinity</p> <p>For essential items, leading retailers maintain prices below recommended retail but above promotional levels.</p>	<p>High price sensitivity & high promotion affinity</p> <p>"low-low" approach—that is, both setting the lowest prices possible and maximizing discounts</p>
<p>Low price sensitivity & low promotion affinity</p> <p>Strategy of enhancing value by increasing margins. These products are priced close to competitors' highest rates, with reduced or no promotions.</p>	<p>Low price sensitivity & high promotion affinity</p> <p>"high-low" strategy with prices near recommended or top competitor rates, using discounts to reduce promotional prices</p>

By analysing data, understanding customer behaviour, and considering market dynamics, **promotion optimization** ensures that temporary price reductions and campaigns align with overall pricing strategies, driving revenue growth, customer engagement, and competitive advantage.

A price-promotion matrix identifies the optimal balance of pricing and promotion for each product being sold.



3. Pricing for Future offerings

Integrating "Pricing for Future Offerings" within pricing analytics entails establishing prices for forthcoming products or services.

This **forward-looking** method involves analysing projected costs, market trends, competition, and customer demand predictions.

Leveraging data insights, predictive models, and market awareness, businesses can strategically set prices for upcoming offerings, optimizing profits, ensuring market success, and aligning with broader pricing strategies and business goals.

Some of the statistical methods used to decide on pricing for future offerings:

- 1. Predictive Modelling:** Utilizes historical data to forecast future demand and price sensitivities, aiding optimal pricing decisions.
- 2. Conjoint Analysis:** Assesses customer preferences for product attributes and price points, informing pricing strategies.
- 3. Regression Analysis:** Examines relationships between factors like cost, demand, and competitive pricing to predict future pricing dynamics.
- 4. Price Sensitivity Analysis:** Evaluates how price changes impact customer demand, guiding pricing decisions for new offerings.
- 5. Machine Learning Algorithms:** Applies advanced techniques to identify patterns and forecast pricing trends for future offerings.

Pricing Analytics helps leaders understand.

Own Price Elasticity

Depicting the reciprocal connection between shifts in your pricing and variations in sales volumes, this analyses how changes in your prices influence the corresponding changes in the quantity of products sold.

Cross-price Elasticities

Assessing the influence of alterations in your competitor's pricing on your volume sales, this gauges how changes in a rival's pricing impact the sales volume of the specific item in focus.

Price Corridors

Described as the price range you must maintain relative to your competitors to retain your market presence/share.

Companies looking to fortify their pricing programs with analytics will have some homework to do. There are many excellent solutions in the market, but not all are suitable for all organizations. Firms may find they also lack internal expertise and access to data sources. Hence, they may need to partner with specialized providers who understand the nuances of the industry, have sound analytical domain expertise, and have the tools to provide quick and accurate results.

A survey by Gartner found that 60% of pricing leaders plan to increase their use of pricing analytics

Theory of Pricing Analytics

Knowing what leaders want with respect to elasticity gives a clear objective with the matter. Let's understand what is the theory behind pricing analytics – Price Elasticity

Price Elasticity

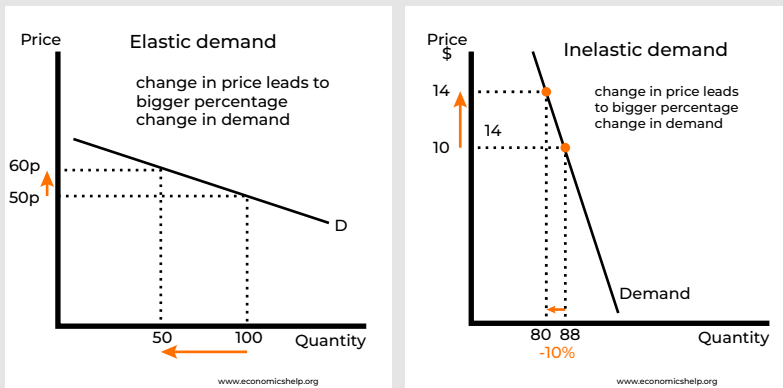
It measures how a change in consumption of a commodity relates to a change in price.

Formulaically, it's expressed as:

$$\text{Price Elasticity of Demand} = \frac{\% \text{ Change in Quantity Demanded}}{\% \text{ Change in Price}}$$

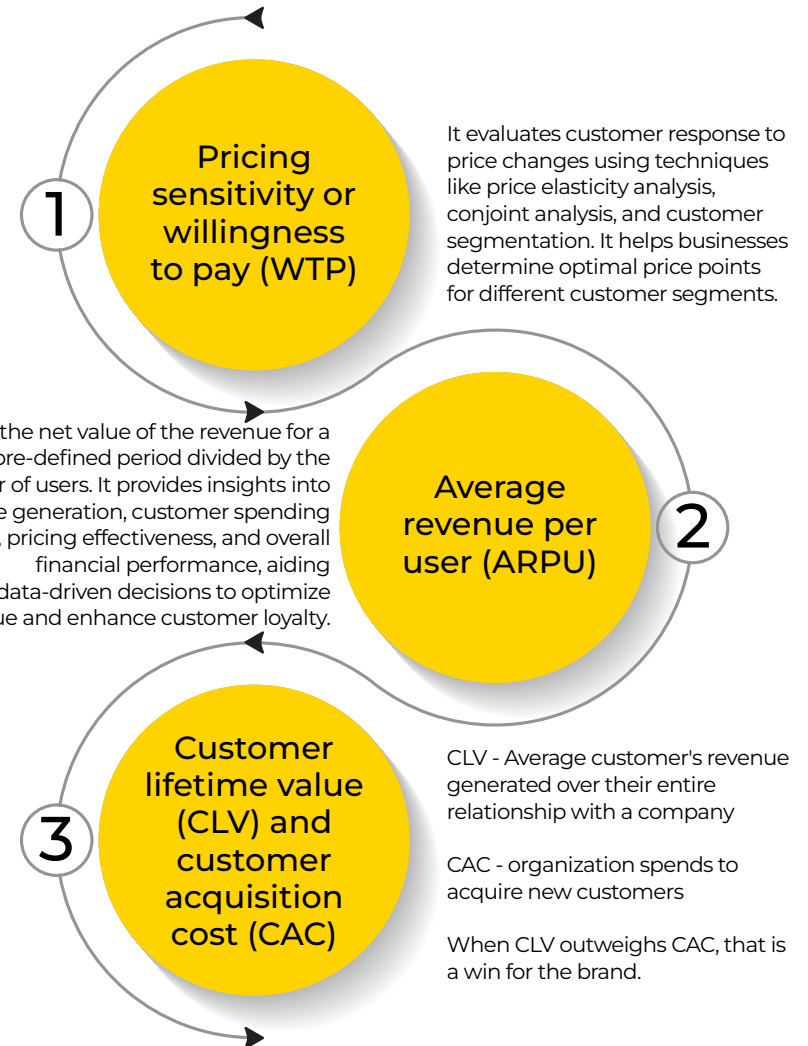
Elastic – Demand decreases when price fluctuates

Inelastic – Demand remains same when price changes



What can we evaluate?

Attention! It's important to delve into the essence of pricing analytics - Understand the "why" of pricing analytics and what it dissects. What's measurable?



Pricing Analytics Models

Some of the most commonly used models to conduct pricing analytics are:

1 Choice-based Conjoint modelling (CBC)

It is a market research technique used in pricing analytics to understand how customers value different product attributes and make trade-offs when selecting products. It helps businesses determine the optimal combination of features and prices that customers find most appealing.

It calculates **willingness to pay** for specific products or services, trade-offs on features, and more using the **conjoint analysis** & **maxdiff analysis** modeling techniques.

It involves presenting respondents with multiple hypothetical product profiles, each with different attribute levels, and asking them to choose their preferred option. The utility that individuals derive from each profile is modeled as a function of the attribute levels.

Statistical techniques like **multinomial logit (MNL)** or **mixed logit models**, are utilized to gauge attribute-level part-worth utilities. These utilities reveal attribute importance and influence on customer choices. These insights help simulate market situations, determine price elasticity, and enhance pricing strategies.

E.g.- For **smartphones**, Choice-Based Conjoint (CBC) modeling helps manufacturers find the best mix of attributes like screen size, camera quality, battery life, and price. By studying customer choices from various profiles, businesses gain insights into preferences and attribute importance. This guides pricing and feature decisions.

2 Van Westendorp

It is used to understand the value of fundamental psychological price points and look at a range of prices that users are willing to pay and the drop-off in consumers based on perceived value.

Example: Imagine a coffee shop considering pricing options for a new specialty coffee blend. The four key questions asked in Van Westendorp's model are:

- **Too Expensive:** At what price would you not consider buying the product?
- **Too Cheap:** At what price would you doubt the quality due to a low price?
- **Expensive:** At what price would you find it somewhat costly but still consider buying?
- **Cheap:** At what price would you see it as a great buy?

Respondents' answers generate curves representing different groups. For example, if the product is seen as "too expensive" at \$8, "too cheap" at \$2, "expensive" at \$6, and "cheap" at \$4, these points are plotted on distinct curves.

Interpretation: The curves intersect to unveil the indices of the **Price Sensitivity Meter**:

- **Indifference Price (IP):** Where "Too Expensive" and "Too Cheap" curves cross, indicating indifference.
- **Optimal Price (OP):** Where "Expensive" and "Cheap" curves intersect, hinting at an ideal price for revenue maximization.

By analysing these indices and understanding consumer perceptions, the coffee shop can set pricing within the acceptable range, ensuring competitive pricing while maintaining perceived quality and value for their new coffee blend.

3 Gabor-Granger

Helps in determining a revenue and demand curve for a specific product. This survey research model helps determine a **product's price elasticity**.

The Gabor-Granger model is based on survey data and involves asking respondents if they would buy a product at different price levels. The survey typically presents price levels and corresponding hypothetical purchase probabilities.

A **demand curve** is then estimated from the survey data using regression techniques, such as **logit or probit models**. The demand curve represents the relationship between price and the probability of purchase.

The price at which the probability of purchase is 50% is considered the optimal price.

E.g. – Athletic Shoes Pricing

A sportswear brand is introducing high-performance running shoes and seeks the best pricing strategy for maximum sales, using the Gabor-Granger model.

- **Survey Setup** – Customers are presented with range of price options
- **Data Collection** – Responses are collected from diverse set of pool
- **Analysis** - Employing the Gabor-Granger model, analyzing the correlation between price and demand. They calculate the **Price Elasticity of Demand (PED)** to understand how changes in price impact potential sales.
- **Price Sensitivity Estimation** – Identifying price range where customers demand become more sensitive
- **Decision Making**- Based on analysis, optimal price range can be determined

For instance, if the analysis indicates that a \$20 increase in price would lead to a 15% decrease in potential sales, the company might opt for a more moderate price adjustment to avoid significant sales decline.

4 Econometric Demand Modelling

Helps in utilizing statistical techniques to analyze the relationship between product demand and various influencing factors, such as price, competitor prices, economic indicators, and consumer preferences.

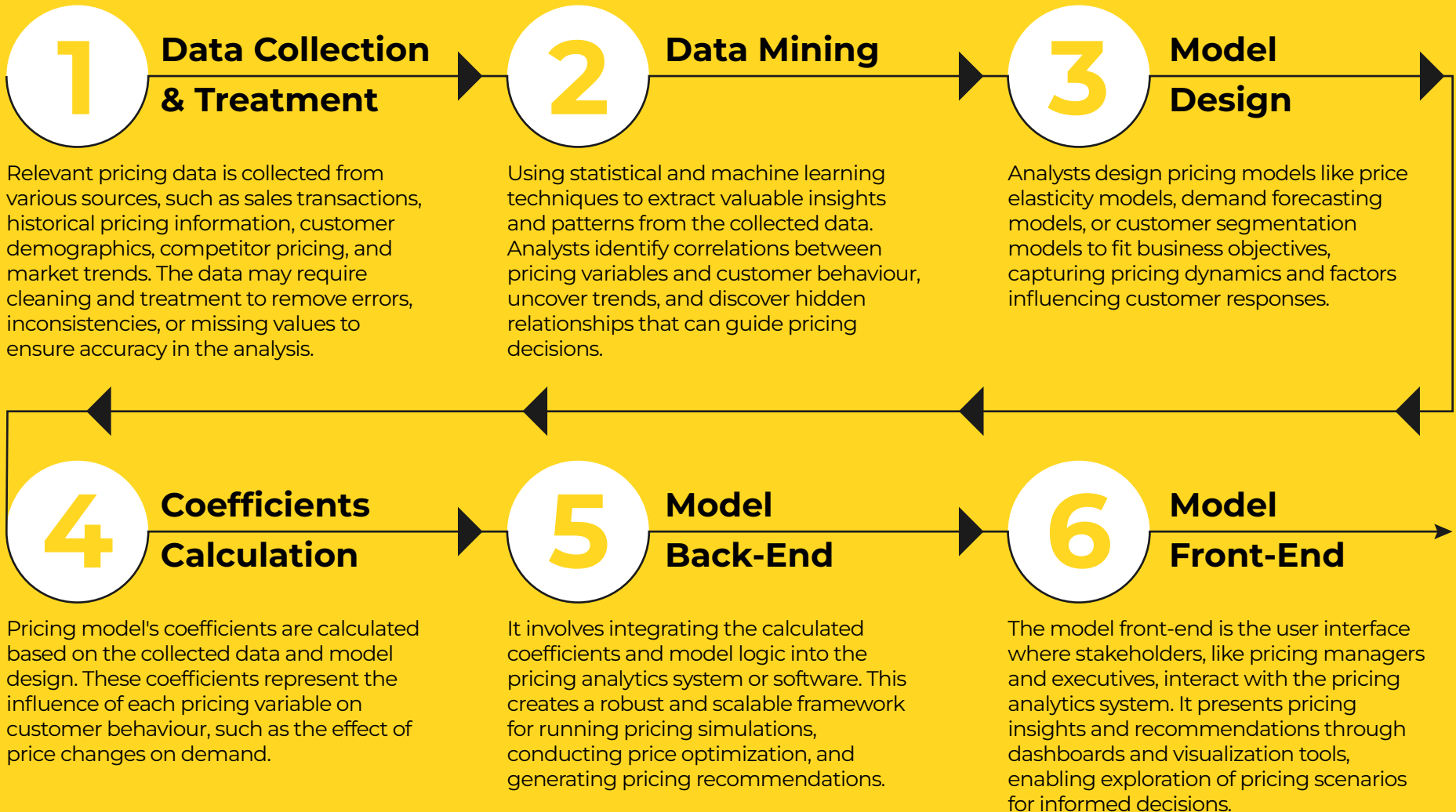
This modeling approach involves businesses predict how changes in these factors will impact demand and make informed decisions about pricing and market strategies. By examining historical data and applying statistical methods, econometric demand modeling provides insights into consumer behavior, allowing companies to optimize pricing and maximize revenue.

E.g.- Soft Drink Sales Forecasting

A beverage company want to understand how **pricing, advertising spending, and consumer income levels** influence the demand for their products. Econometric demand modeling is utilized for this purpose.

- **Data Collection:** Gathering historical data on soft drink sales, including variables such as prices, advertising expenditures, consumer income, and economic indicators.
- **Analysis** – With **demand model & Regression analysis**, establish correlations between sales, prices, and other variables.
- **Price Elasticity Assessment** - demand model helps the company assess how changes in pricing will affect soft drink sales.
- **Advertising Impact** – By incorporating advertising spending data, the company can gauge how increased promotional efforts impact sales and consumer behaviour.
- **Scenario Planning** - adjusting factors like prices and advertising budgets. This empowers them to anticipate outcomes and formulate strategies for maximizing revenue.

How to optimize pricing analytics?



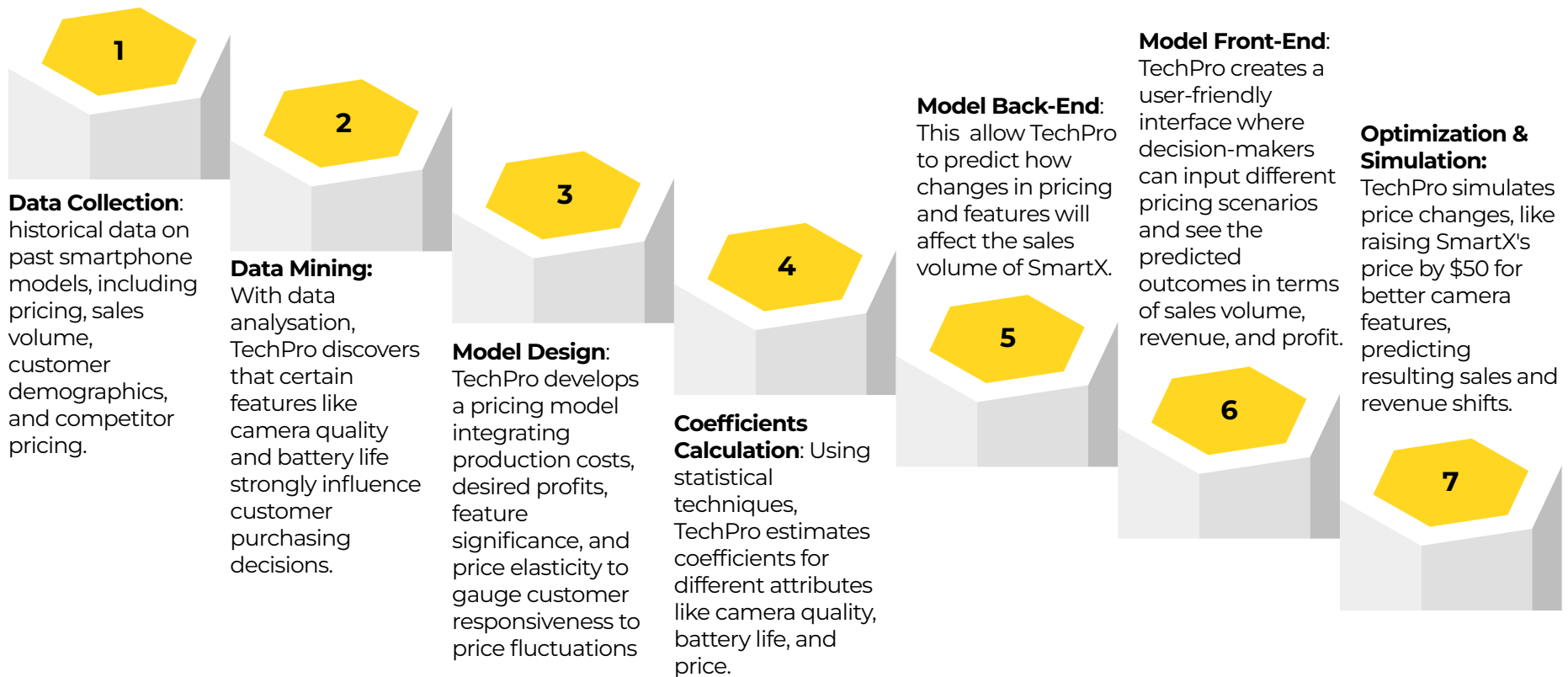
Price Analytics Examples

While price optimization may seem complex, we are familiar with it in our everyday lives. Let's take a look at some real-world examples

Sample Process – Optimization of “Tech Pro”

Consider an electronics company, "TechPro," that specializes in manufacturing smartphones. Using pricing analytics, TechPro aims to optimize the pricing of their latest smartphone model, "SmartX," to achieve maximum profitability while appealing to their target customer base.

Here's a hypothetical example of how pricing analytics can be applied to SmartX:



Based on the simulation results, TechPro decides on an optimal pricing strategy for SmartX.

A photograph of a business meeting around a table. Several people in business attire are looking at various documents and charts. The charts include a pie chart, a bar chart, and a line graph. A large, semi-transparent white circle is overlaid in the center of the image, containing the text 'Case Study'.

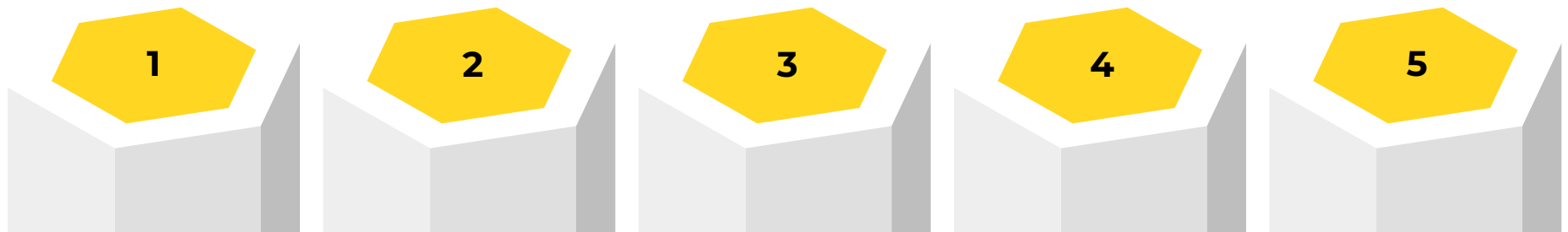
Case Study

Price Analytics for an Alco-Bev Firm

Context

In the dynamic world of the alcoholic beverage industry, pricing strategies play a pivotal role in shaping consumer preferences and market share. To make informed decisions in pricing, it's crucial to understand the potential impact on sales volume, market share, and overall profitability.

Insights generated using advanced analytics



Sales Forecast Analysis: Price elasticity analysis involves simulating various scenarios to predict consumer responses to price changes.

Scenario - Customer increased the price of a specific brand by 10%.

Outcome: This price increase resulted in a 5% decrease in sales volume for that brand.

Market Share and Competition: Pricing decisions can also affect your market share in relation to competitors. 1. Impact on own brand market share if competition does not raise the price 2. Impact on own brand's market share, if competition also takes up a price increase to maintain the price gap

Scenario - If competitors respond to the price increase by raising their prices as well,

Outcome: With competitors also increasing prices, our customer's market share remained stable due to the price gap being maintained

Consumer Behavior: Consumers often switch between brands and segments based on price changes. For example, a price increase in one brand may lead consumers to shift to another brand within the same category or segment:

Scenario - 10% price increase in own Brand

Outcome: 3% increase in sales for Brand B in the same segment, according to our customer's data.

Long Term Outlook: It's essential to consider both short term and long term effects. While market share may dip in the short term, maintaining a competitive price strategy could lead to long term gains:

Scenario - 10% price increase in own Brand

Outcome: Market share decreased by 2% in the short term but ultimately surpassed competitors, achieving 5% growth in the long term, according to our customer data.

Pricing Scenarios: To optimize profitability, it's beneficial to create and analyze different pricing scenarios. For instance, you could explore a 5% price increase instead of 10% to balance revenue and volume:

Scenario - A 5% price increase in price

Outcome: might lead to a 3% decrease in volume, but a 5% increase in revenue and actual increase in market share over time, based on our customer's data.

Company Overview

Our Offerings

Personalized and dynamic pricing

Utilize up-to-date information on individual customer preferences, market dynamics, and competitor actions to optimize pricing and discounts effectively.

Revenue growth management

Enhance list prices, trade promotions, product portfolio mix, and pricing package structures for optimal results.

Improved win % and customer profitability

Improve the chances of winning deals and achieve optimal pricing to maximize deal margin and customer profitability.

Agile Forecasting & Scenario Planning

Dynamic forecasting considers historical data and present consumer behaviour trends to provide precise predictions of future sales. It enables modeling different pricing scenarios for specific time frames and quickly quantifying their impact.

Trade Promotions

Our razor-sharp focus on leveraging the potential of analytics to drive promotional effectiveness.

About Polestar Solutions

Polestar Solutions is a trusted partner in the analytics space, providing valuable support to businesses looking to optimize their price optimization processes through data analytics. By leveraging our expertise as an AI and Data Analytics powerhouse, Polestar Solutions helps unlock the full potential of their organisation data.

We offer a range of services that encompass the entire pricing analytics lifecycle. From establishing a strong analytics foundation to driving innovation initiatives, Polestar Solutions ensures businesses can derive actionable insights and make informed decisions to drive profitability.

