



CASE STUDY

A PHARMA COMPANY INCREASES YEARLY MARGIN BY \$8M USING A PRICE ELASTICITY SIMULATOR

A pharmaceutical company in the US needed to optimize their pricing methods. They had to anticipate their customers' sensitivity to drug prices, to improve both revenue and margins in a specific channel of the US pharmaceutical market.

CHALLENGES

- Optimize prices to improve margins.
- Track brand equity.

MAKING THE RIGHT PRICING DECISIONS TO FORECAST DEMAND WITH A PRICE-ELASTICITY SIMULATOR

In our daily work with the pharmaceutical company, we found several instances in which drugs showed a high level of price elasticity. That is to say, when the price of medicines rose, the amount demanded fell and when the price fell, the amount demanded rose.

For best pricing, our simulator helped to anticipate the effect a change in price would have on the future demand of pharmaceutical products in a region or market channel.

Finally, the price elasticity simulator also tracked a drug's brand equity on the market, relative to the competition. The stronger the brand, the less price-elastic the demand will be.



Adenosine-3mg/ml Company A

Price April 20 = \$42.48
 Price May 20 = \$27.18
 Qty April 20 = 366 units
 Qty May 20 = 666 units
 Price elasticity= -1.32



Adenosine-3mg/ml Company B

Price May 20 = \$42.60
 Price June 20 = \$39.59
 Qty May 20 = 2,579 units
 Qty June 20 = 4,833 units
 Price elasticity= -8.30

SOLUTIONS MADE POSSIBLE BY KONPLIK'S PRICE-ELASTICITY SIMULATOR

1. Intense cross-price elasticity analysis

In the real world, the demand for a product is not only dependent on its own price, but also on the price of other "related" products. When setting prices, pharmaceutical companies need to measure the sensitivity of competing medicines to their products through detailed cross-price elasticity analysis.

The availability of substitute goods is probably the main factor determining the elasticity of demand for a pharmaceutical product.

The more products available, the higher the elasticity, as consumers can easily switch from one good to another. If no substitutes are available, the demand will be inelastic.

For example, Adenosine-3mg/ml-vial has 7 products competing as therapeutic equivalents in the US market. At least two of them show high ratios of price-elasticity.

If, instead of Adenosine, we had a newly patented medicine with no therapeutic equivalent, a 20 percent rise in price might not affect demand at all.

2. Evidence-based algorithms

Price elasticity of demand varies depending on the product that is being marketed. Some products have a very elastic demand, especially if they have many therapeutic equivalents available on the market.

Our algorithms automatically pitch a number of models against each other in simulations that decide which one is the most accurate for each product.

3. Permanent updating

The system updates its predictions, every time the simulator receives new data and warns users whenever it detects a change worth communicating, such as demand variations to the tune of +/- 20% at an SKU.

4. Strong shortage prediction and demand forecasting

Shortages, like discontinuations and new launches, have a dramatic effect on demand forecasts. Konplik's SIMULATOR smoothly integrates into EQUALIZER for SHORTAGES and ENVISION-DEMAND to deliver more accurate predictions of demand.

THE CASE IN NUMBERS

A pharmaceutical company that combined the power of a simulator of price-elasticity with demand forecast adds \$8m of margin yearly.

