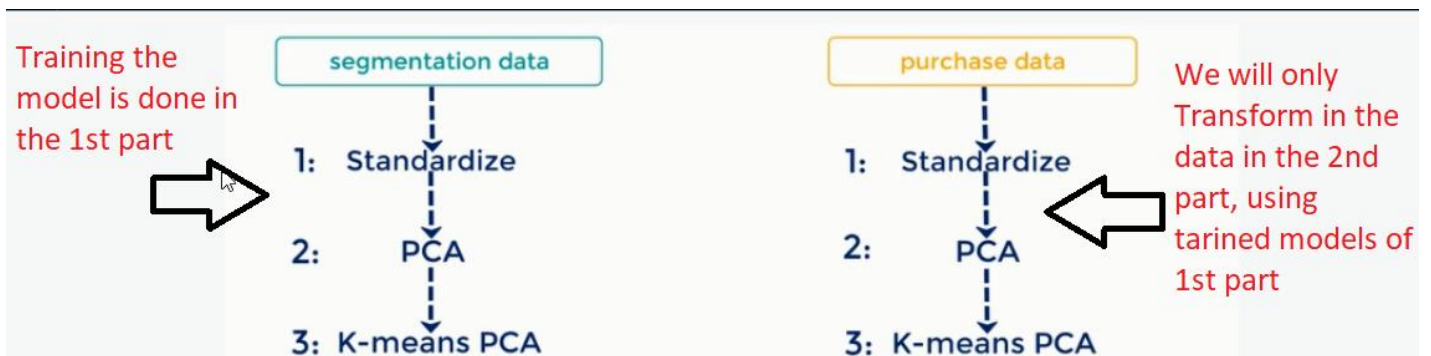


# PURCHASE ANALYTICS

## About the data:

- Targetting is done through analysis, marketing techniques can be decided
- Based on our analysis marketers will be able to know the behaviour of the customers, based on the price of the product.



**Marketing Mix** is the main approach to positioning

1. To develop best product and offer it at the **right price** + through **right channels**.
2. In this project we will cover customer analytics that answers 2 fundamental questions about positioning and marketing mix:
  - **Purchase Probability:** *Will the customer buy* a product from a certain prod category or not when they enter a shop.
  - **Brand Choice Probability:** If they have decided that they will buy that product category, *which brand are they going to choose*.
3. Marketing mix contains 4 variables, 4 Ps of marketing:
  - Product: Its features, design, branding
  - Price: Price, discounts
  - Promotion: To promote the product
  - Place: Distribution of product, where when how

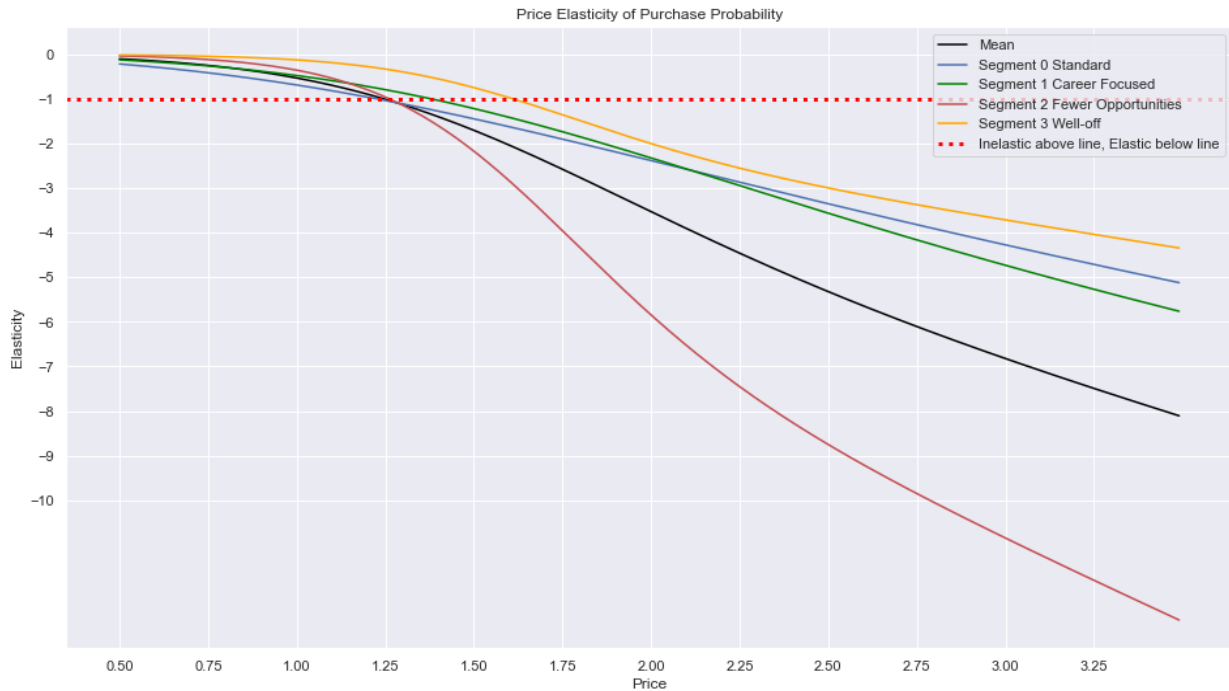
## **Price Elasticity** (PE)

1. How purchasing behaviour changes as process change.
    - $PE = (\% \text{change is economic outcome of interest}) / (1\% \text{ change in price})$   
 $= (Y \text{ new} - Y \text{ old} / Y \text{ old}) / (X \text{ new} - X \text{ old} / X \text{ old})$
-

## 1. Purchase Probability Model:

### How price affects purchase decision, will a product be bought?

- **Logistic Regression** is used
- To predict Incidence of purchase i.e., our **dependent variable is Incidence**. Our **dependent variable is price** – **irrespective of the brand**, as we want to know effect of price on whether the person buys **any** product or not.
- Our aim is to get % change in purchase prob to 1% change in price v/s price graph: **Purchase probability elasticity v/s Price of product graph**



## 2. Brand Choice Model: How price changes prob of purchase of each brand?

- **Multi-nominal Logistic Regression** is used

