Customer Segmentation & Early Adopter Analysis: US Canine Petcare

Who is Zoetis?
Zoetis is the world leader in discovering, developing, manufacturing, and marketing veterinary medicines and vaccines – as well as complementary diagnostics, genetic tests, and services.

Problem Statement
Who Are Important Zoetis Customers?
Can we identify veterinary customers in the US Petcare sector for which the Zoetis marketing team should target with priority?

Data Set
- Sales Table
  Ex: Drug Name, Vet ID, Sale Amount, Date, Product ID
- Customer Table
  Ex: Vet ID, City, State, Region, Market Segment, Corporation Member

Exploratory Analysis
Sales of 12 Zoetis Canine Drugs in US by Clinic Size

Methodology
Analysis 1:
1. Model evolution of sales for each veterinarian by a parabola over time
   \[ y = \beta_0 + \beta_1 t + \beta_2 t^2 \]
2. Cluster veterinarians into Fast, Slow, and Not Emerging customers based \( \beta_2 \), which is the slope of the parabola

Analysis 2:
1. Analysis of evolution and speed of new drug ratio
   \[ y = \text{new drug ratio} = \frac{\text{new drug sales}}{\text{old drug sales} + \text{new drug sales}} \]
   \[ y = \beta_0 + \beta_1 t + \beta_2 t^2 \]
2. Cluster veterinarians into Early Adopters & Not-Early Adopters based on based \( \beta_2 \), which is the slope of the parabola

Results
- Cluster Corporate Vet %
  - Slow Emerging: 34.64%
  - Fast Emerging: 44.95%
  - Not Emerging: 22.17%

Interpretation & Impact
- Fast-Emerging customers contain the largest percentage of corporate vet clinics
- Efforts of sales representatives in advertising products to vets had a high impact on the sales growth
- Larger clinics have fastest growth
- The distribution of Fast-Emerging customers around the US differs from that of Non-Emerging and Slow-Emerging customers
- The better Zoetis does at selling its products, the faster the pets get relief, aligning with Zoetis’ mission: “to nurture our world and humankind by advancing care for animals.”
- Early Adopters have higher engagement than Not-Early Adopters
- Very small/small sized clinics have more Early Adopters than Not-Early Adopters
- Targeting Early Adopters allows Zoetis to capture a larger portion of the market share while the drug is under patent, and competition from the industry does not exist
- Getting new products into the hands of vets ultimately increases the vitality and longevity of animals