



# Customer Segmentation & Early Adopter Analysis: US Canine Petcare

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## 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**?

## Goals

**Analysis 1:** Analyze sales of 12 Zoetis canine drugs and **cluster** customers into groups:

Slow-Emerging

Fast-Emerging

Not-Emerging

**Analysis 2:** Identify vets more apt to adopt new products → **Early Adopters**

## Data Set

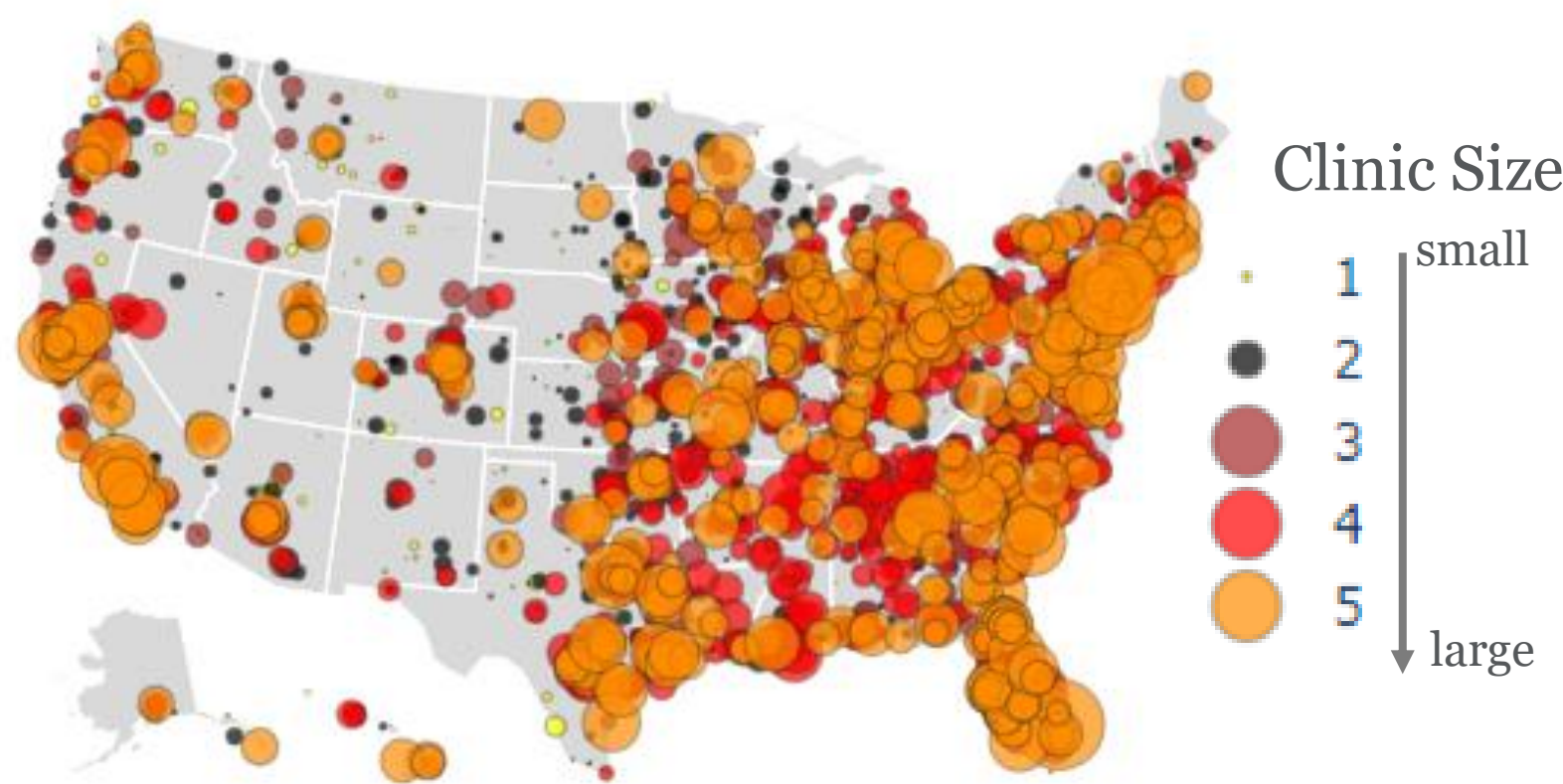
Sales Table

Ex: Drug Name, Vet ID, Sale Amount, Date, Product ID

Customer Table

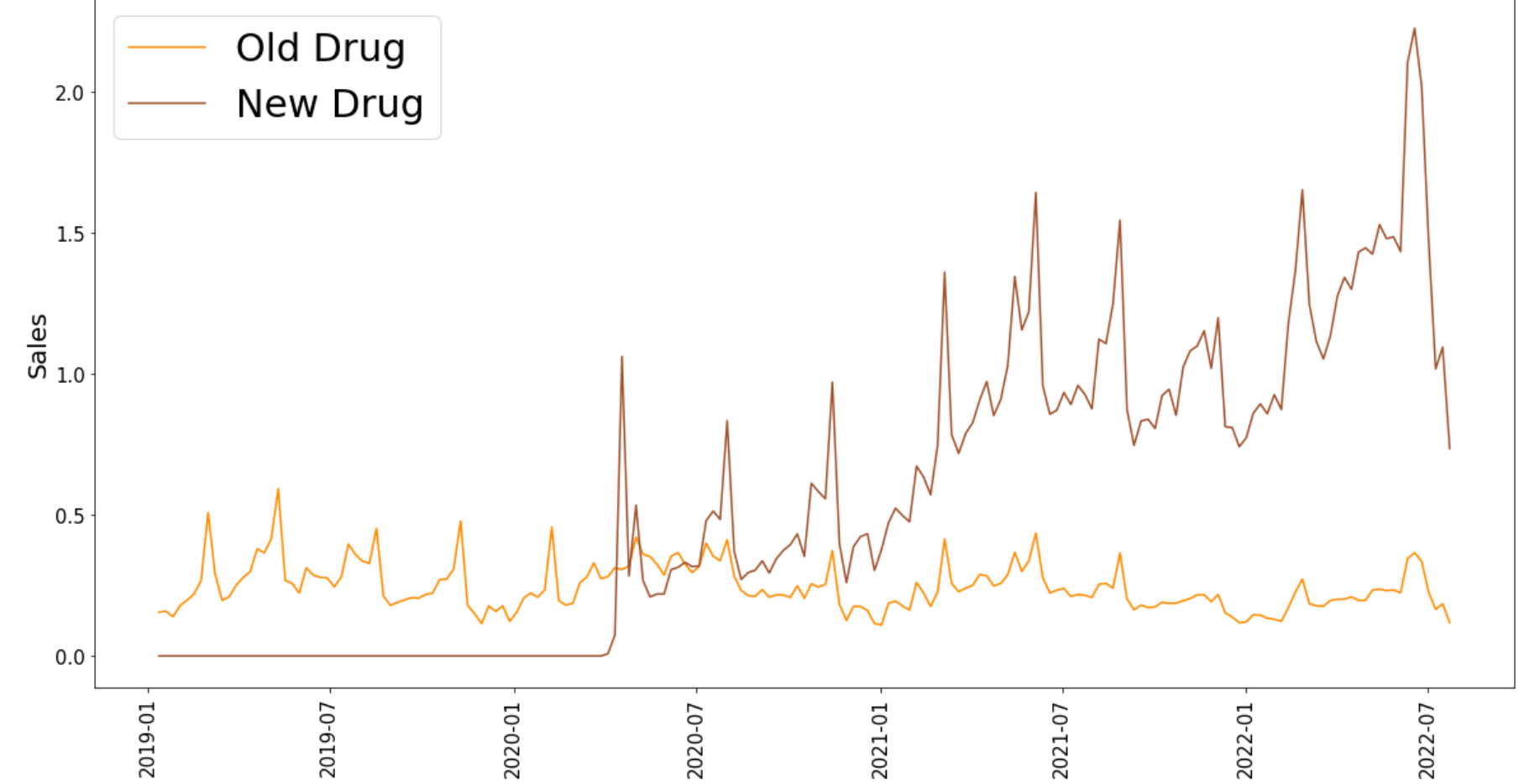
Ex: Vet ID, City, State, Region, Market Segment, Corporation Member

## Exploratory Analysis



Sales of 12 Zoetis Canine Drugs in US by Clinic Size

## Evolution of Old Drug & New Drug Sales



## Methodology

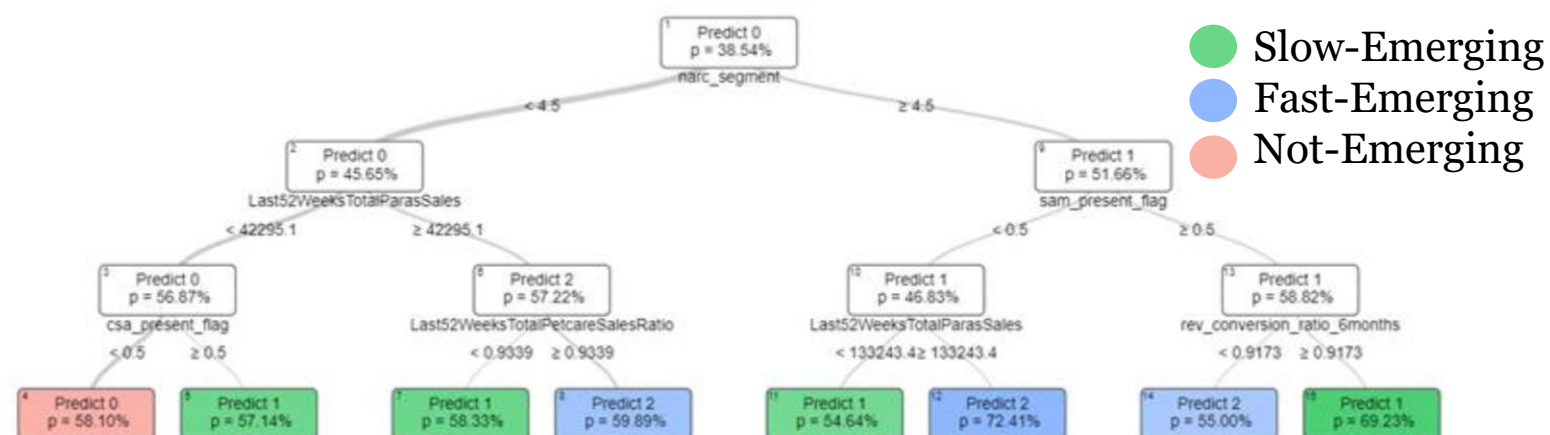
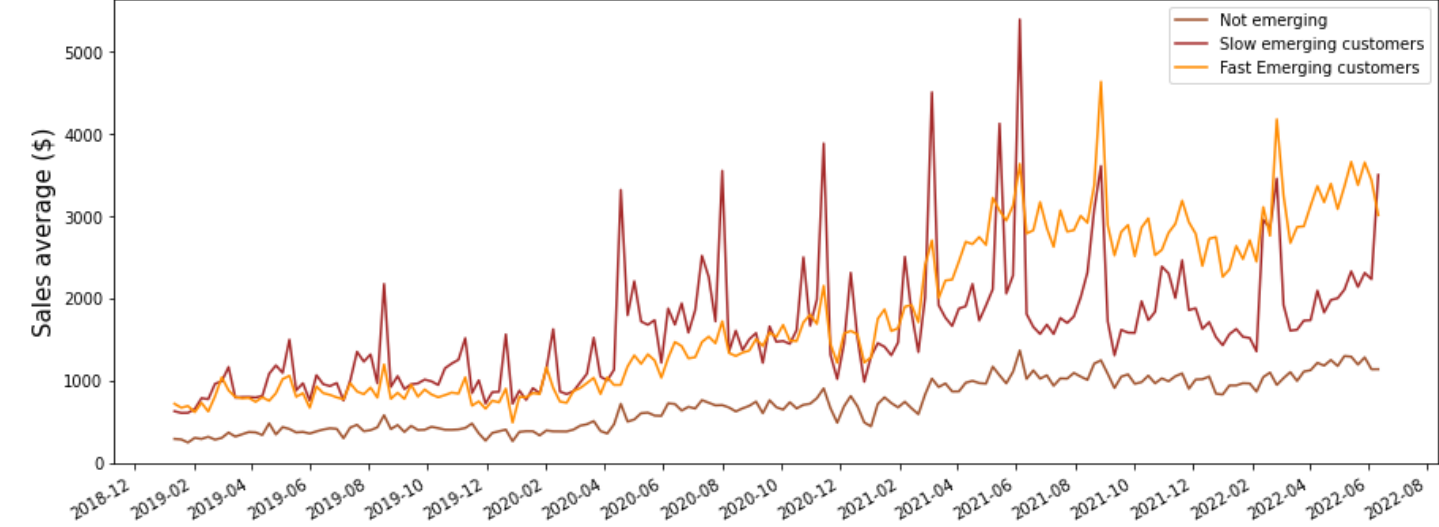
### Analysis 1:

1. Model evolution of sales for each veterinarian by a parabola over time

$$y = \beta_0 + \beta_1 t + \beta_2 t^2$$

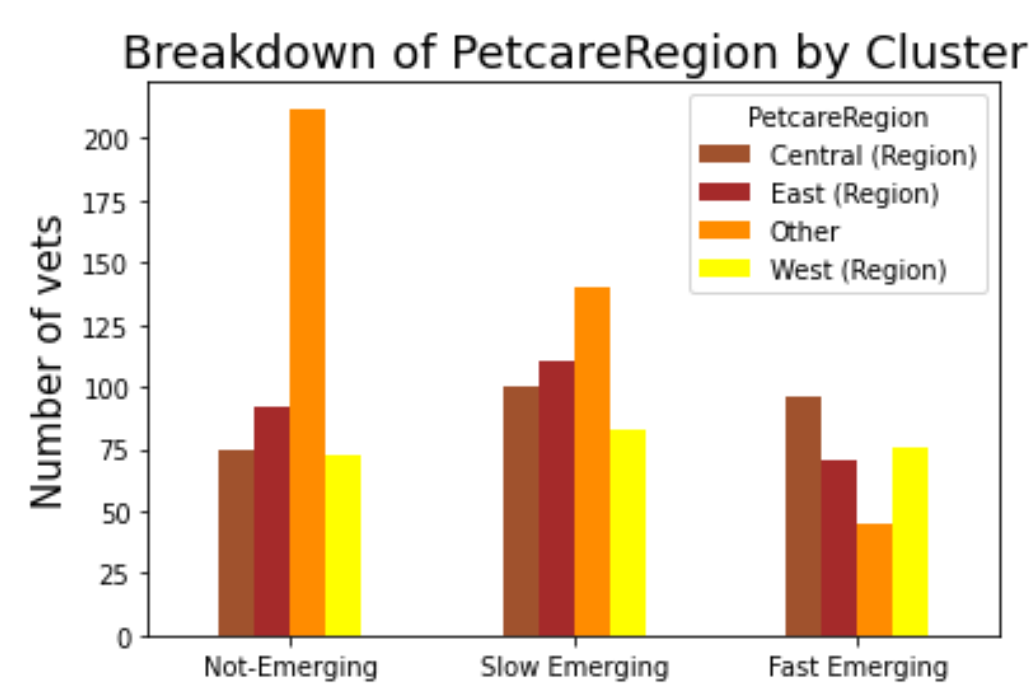
2. Cluster veterinarians into Fast, Slow, and Not Emerging customers based  $\beta_2$ , which is the slope of the parabola

Evolution of Sales by Cluster

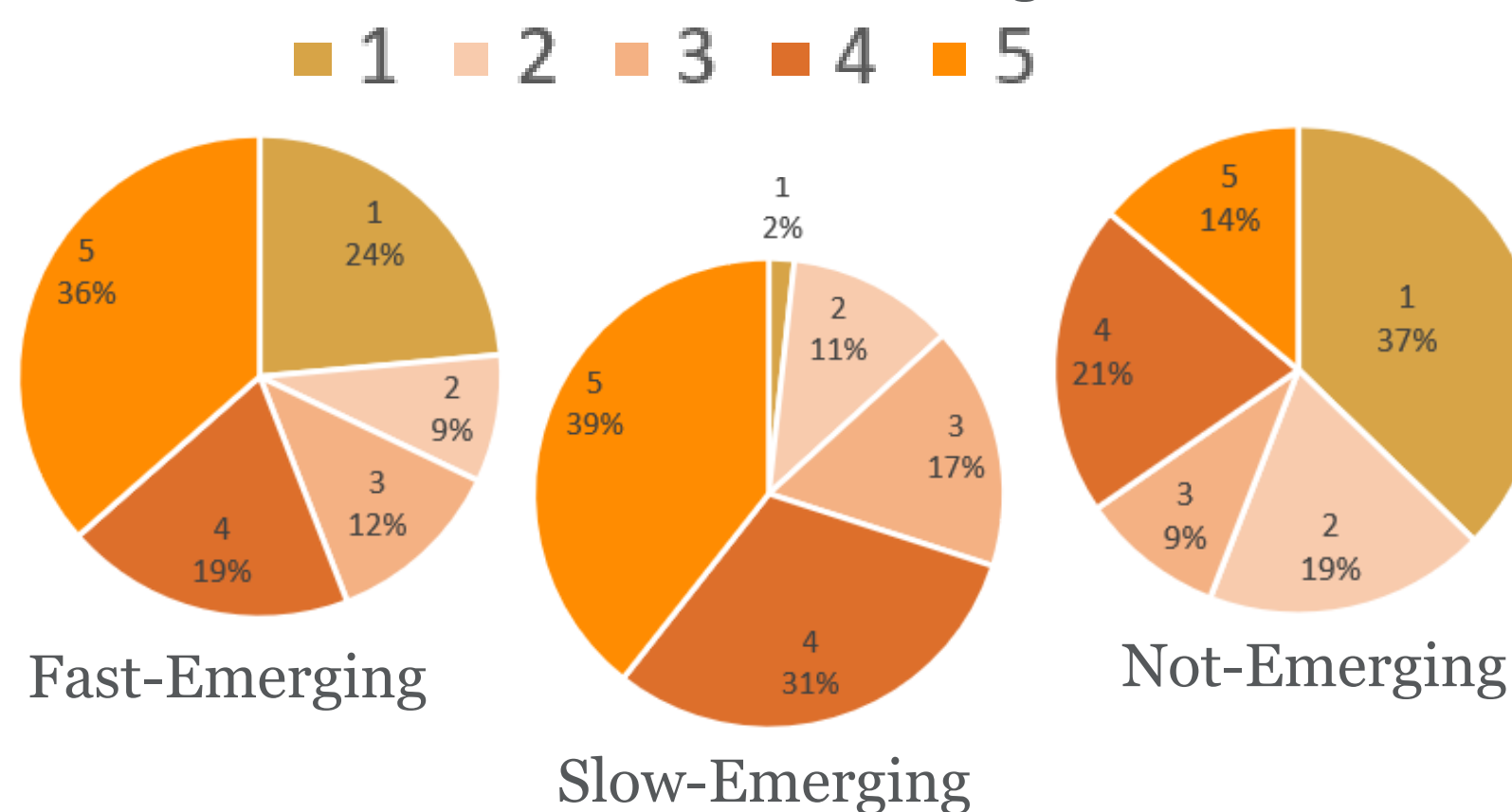


## Results

Cluster	Corporate Vet %
Slow Emerging	34.64%
Fast Emerging	44.95%
Not Emerging	22.17%



### Customer Segmentation & Clinic Sizes



## 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."

### Analysis 2:

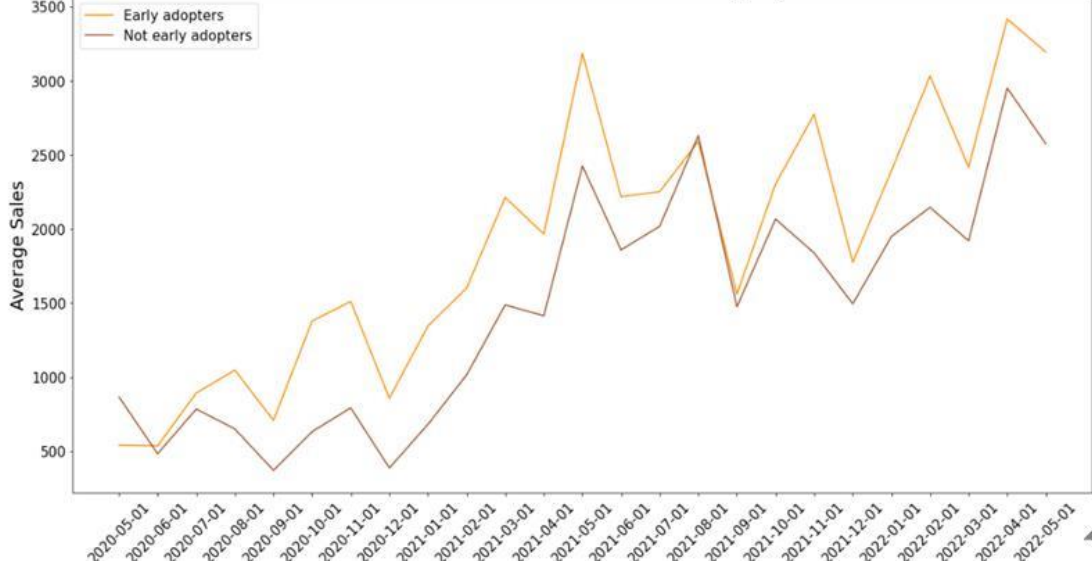
1. Analysis of evolution and speed of **new drug ratio**

$$y = \text{new drug ratio} = \frac{\text{new drug sales}}{\text{old drug sales} + \text{new drug sales}}$$

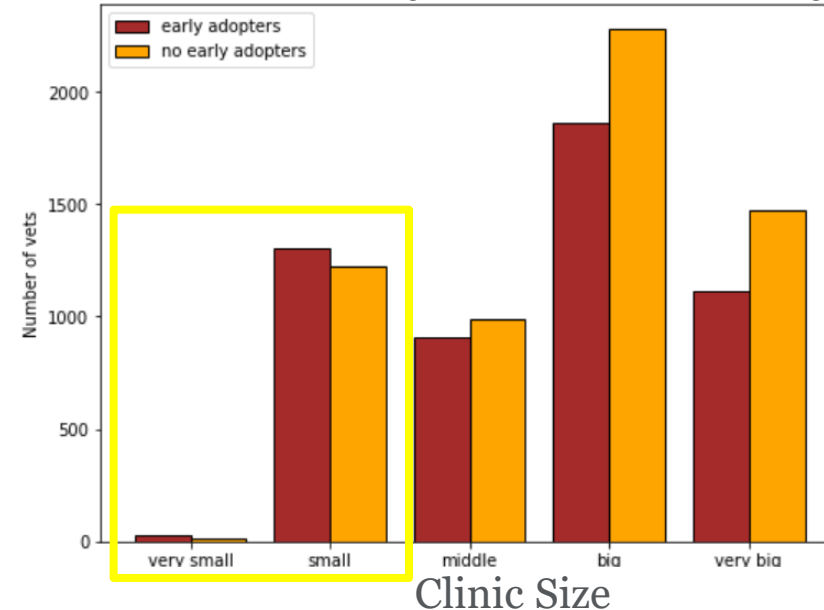
$$y = \beta_0 + \beta_1 t + \beta_2 t^2$$

2. Cluster veterinarians into Early Adopters & Not-Early Adopters based on based  $\beta_2$ , which is the slope of the parabola

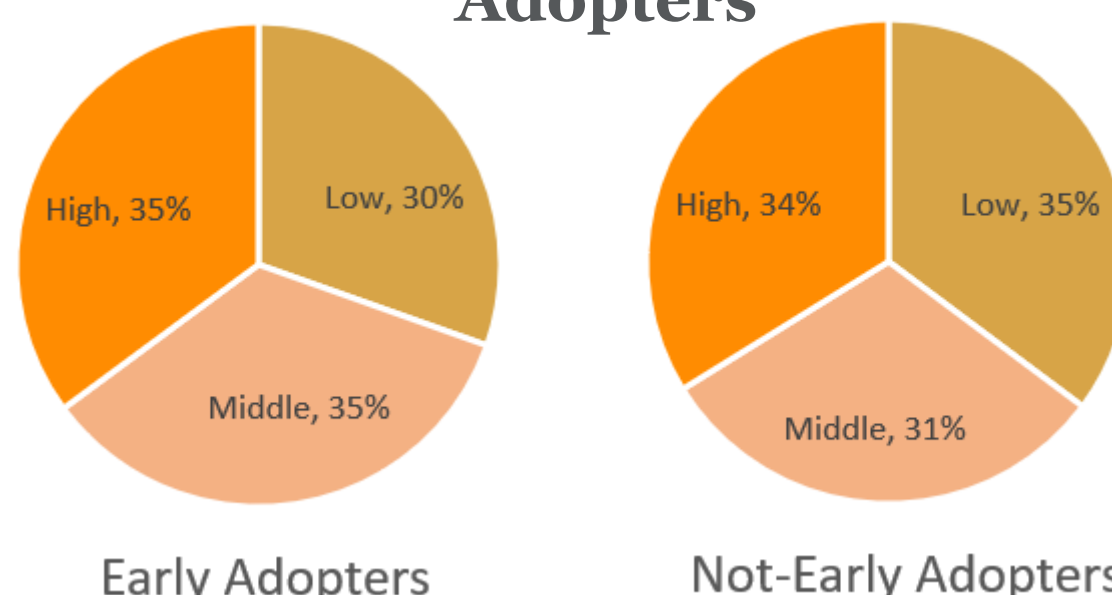
Evolution of Sales of the New Drug by Cluster



### Clinic Size of Early & Not-Early Adopters



### Engagement from Early & Not-Early Adopters



- 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