When You Visualize You Materialize

Take Action With Your Customer Data Using Visualization

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What is Data Visualization?

- Study of the graphical representation of data

 - **Main purpose is to communicate information effectively**

How Does Data Visualization Work?

- Maximizes power of the human visual system:

  1. Reduce the amount of information displayed
  2. Minimize the amount of attentive or conscious thought processes
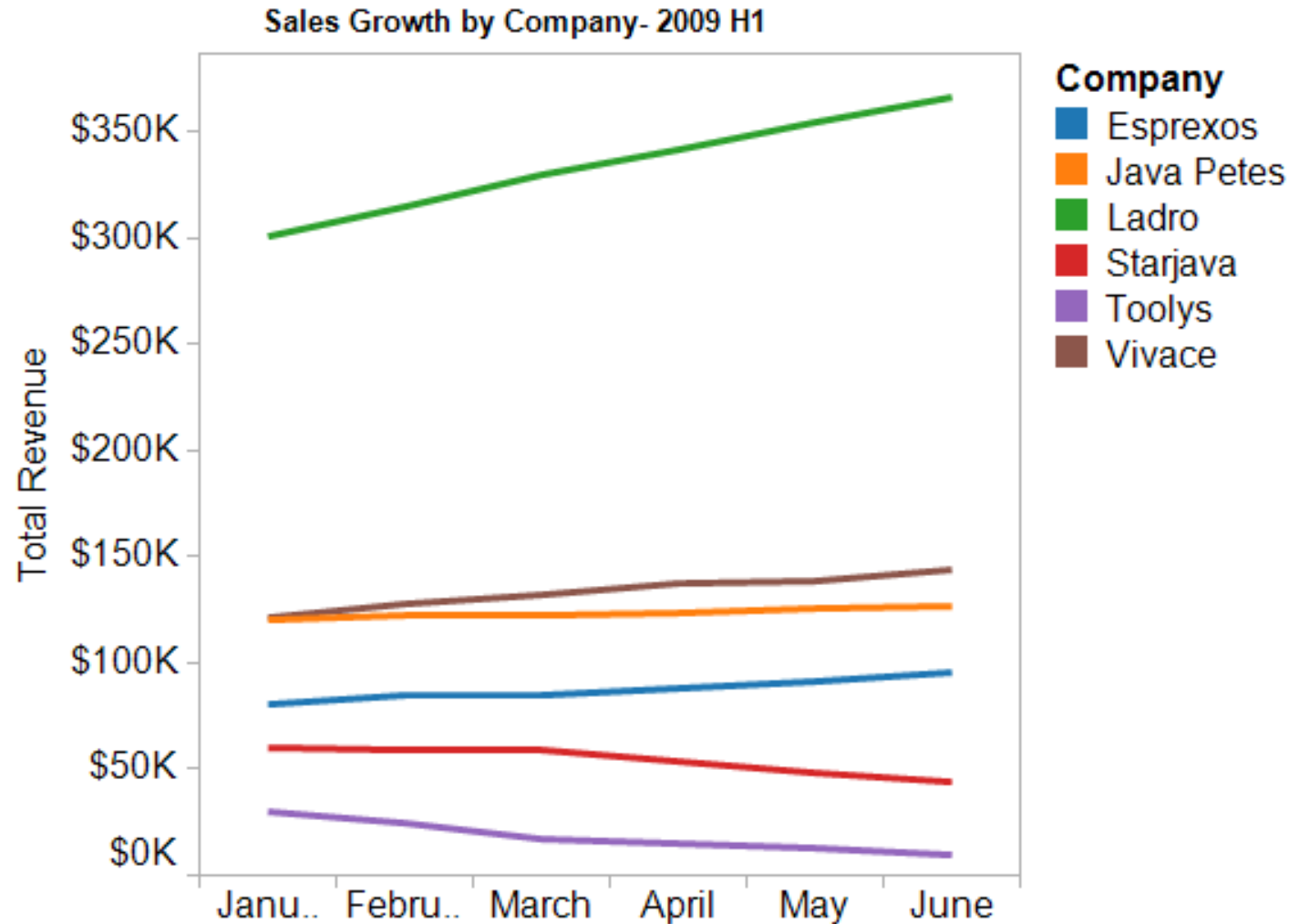 3. The viewer can more easily detect patterns, trends or outliers in the data

- An innovative analysis tool developed with one goal: making data visualization simple, effective and broadly accessible

Excel Default Growth Rate Chart
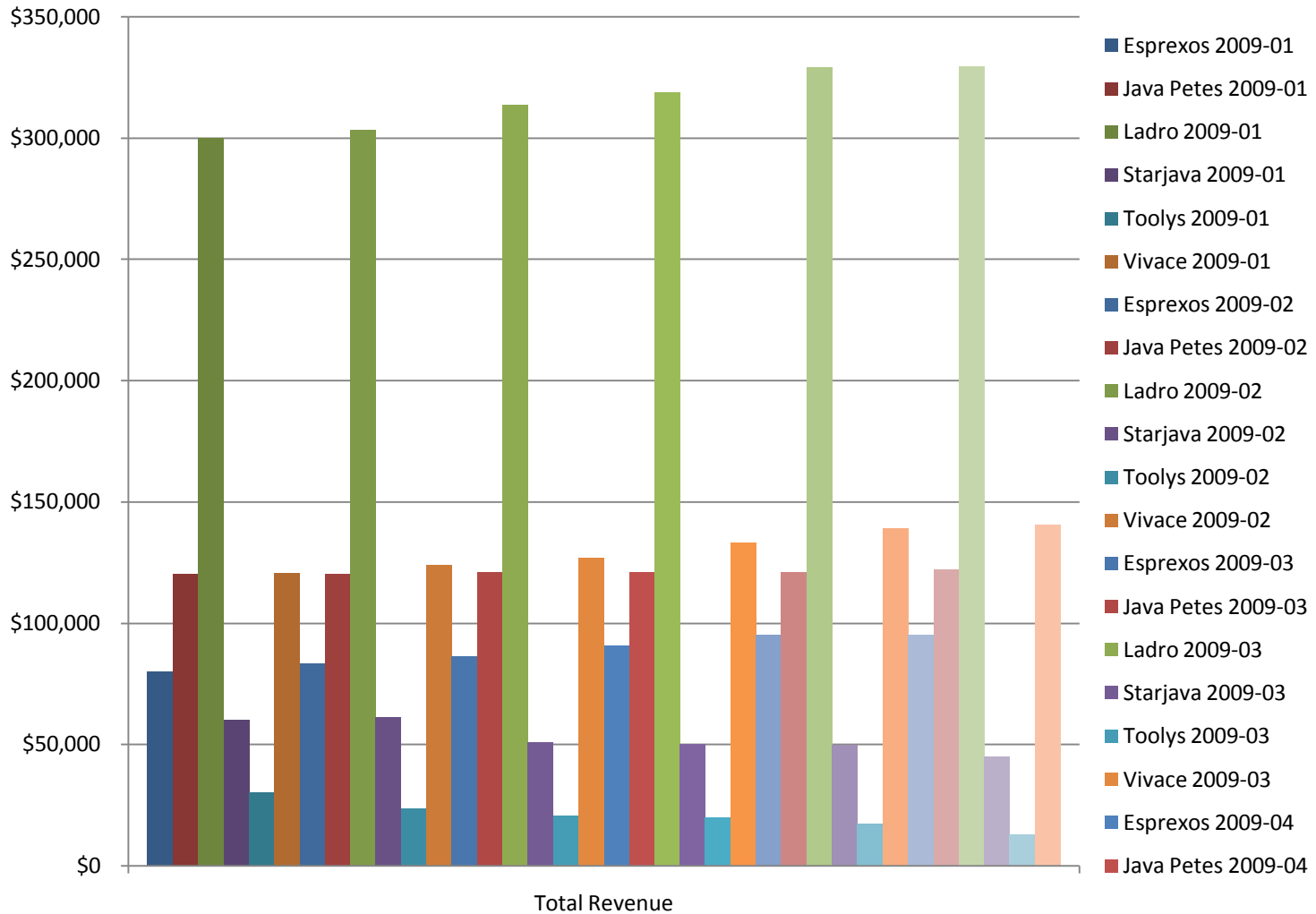
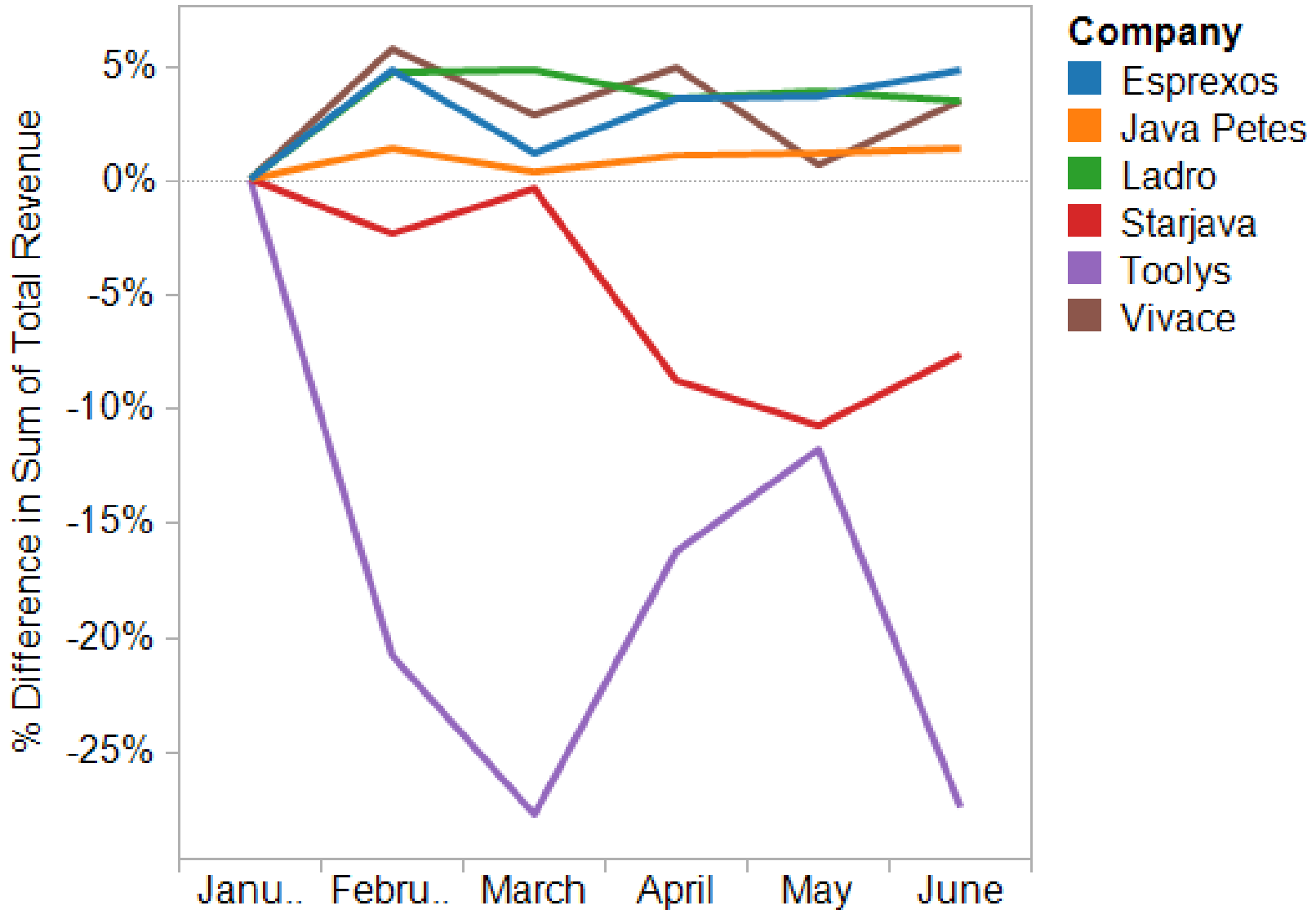- Confusing- value of the data is obscured.

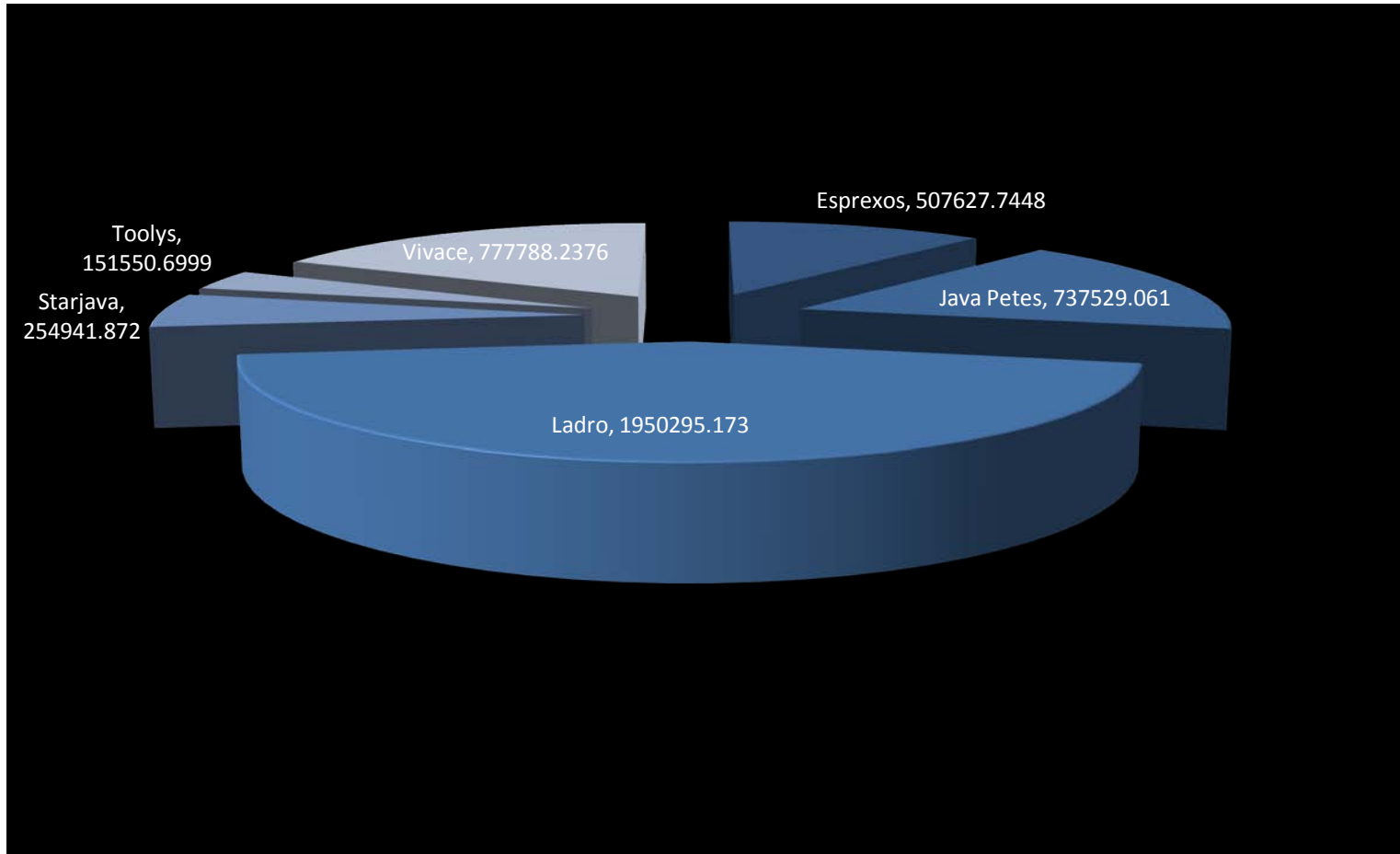# Tableau's Default Version of Growth Rates

Sales Growth by Company- 2009 H1

- Called a "view" in Tableau.

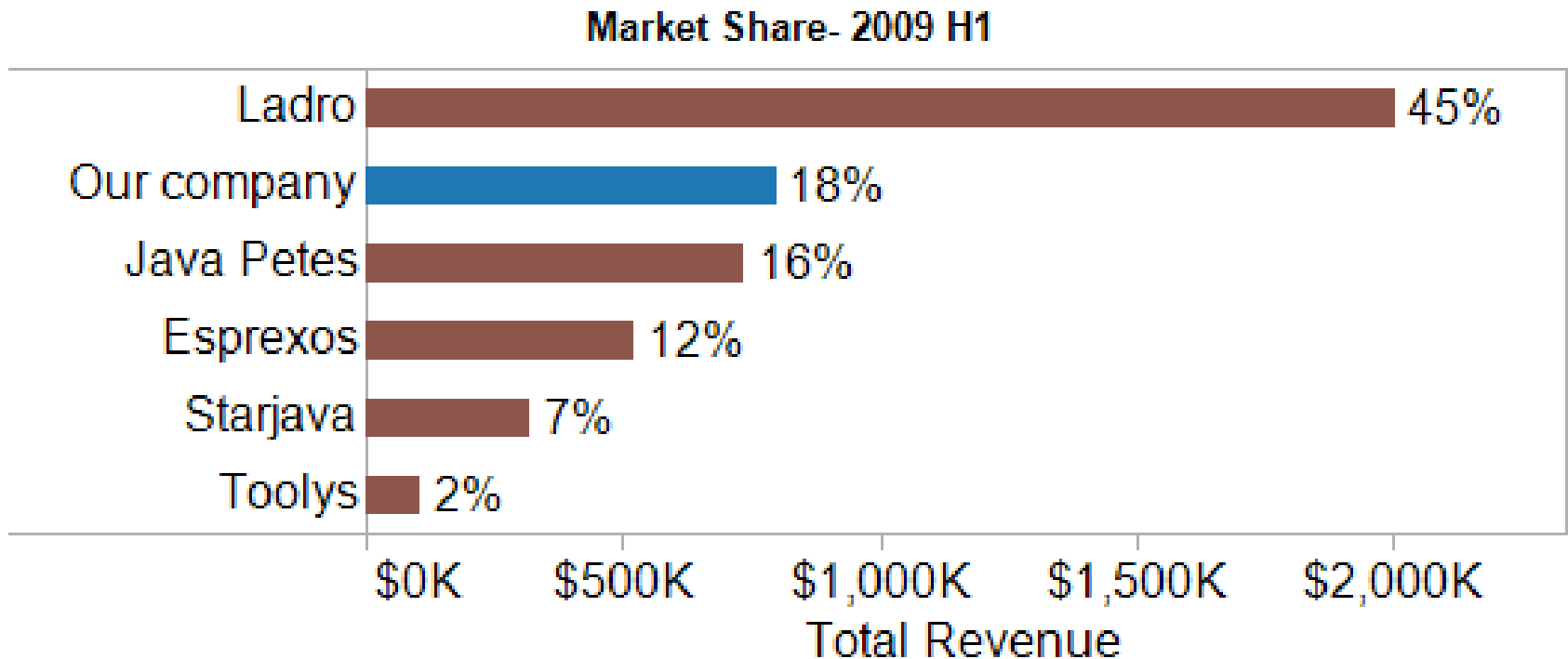# A Few More Clicks…

Monthly Growth Rate- 2009 H1

Excel Default Share of Market Chart

- How useful is the "exploding 3-D pie"?
- Illustration of "chart junk" and flash over substance.

Tableau's Default Layout

Market Share- 2009 H1

	Total Revenue	
Ladro		45%
Our company		18%
Java Petes		16%
Esprexos		12%
Starjava		7%
Toolys		2%

$0K $500K $1,000K $1,500K $2,000K
Total Revenue

- Contrast with pie chart
- Quicker interpretation
- Key metrics called out

Road to Visualization

**Customer demographic and sales databases
from a boutique winery**

+

=

**Customer-level information vital to managing a
dynamic, cutting-edge marketing program**

- Customer Segmentation
- Customer Lifetime Value (LTV)
- Integration
- Strategic Dashboard for Management (Visual report)

Boutique Winery Case Study

- West Coast

- Revenue= $4.1m

- Strong direct business
  - 60% of sales
  - 87% of gross profit

- Data "scrambled" for this demo

Customer Acquisition

- Winery's tasting room
  - sample and buy wine
  - sign up for emails and newsletters
  - join the wine club

- Recent press coverage brought an influx of casual visitors

Traditional Customer Segmentation

- Winery management identified segments based on observation and experience

- Traditional Method
  - Guidance for broad marketing decisions
  - Weaknesses
    - Generalizations
    - Hard to measure impact

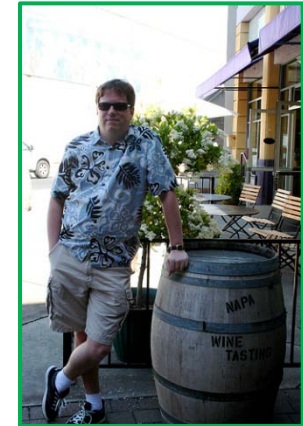- Winery was unable to target specific customer segments

Data-Based Customer Segmentation

- Developed grouping rules using customer and sales databases
  - Socio-demographic traits
  - Purchasing behaviors

- Goals: segment-specific advertising methods, products, services and purchasing channels
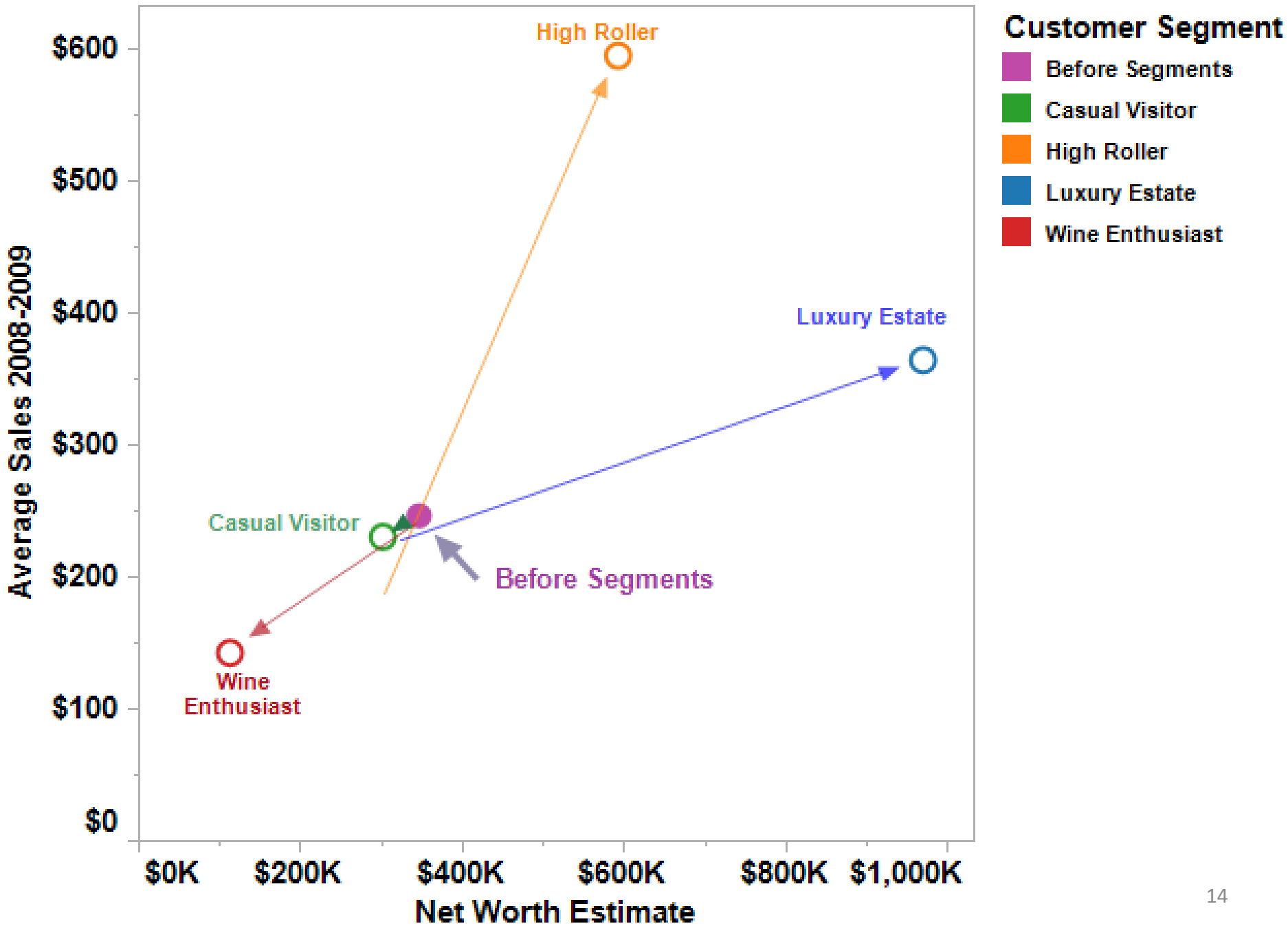
- Possible analyses?
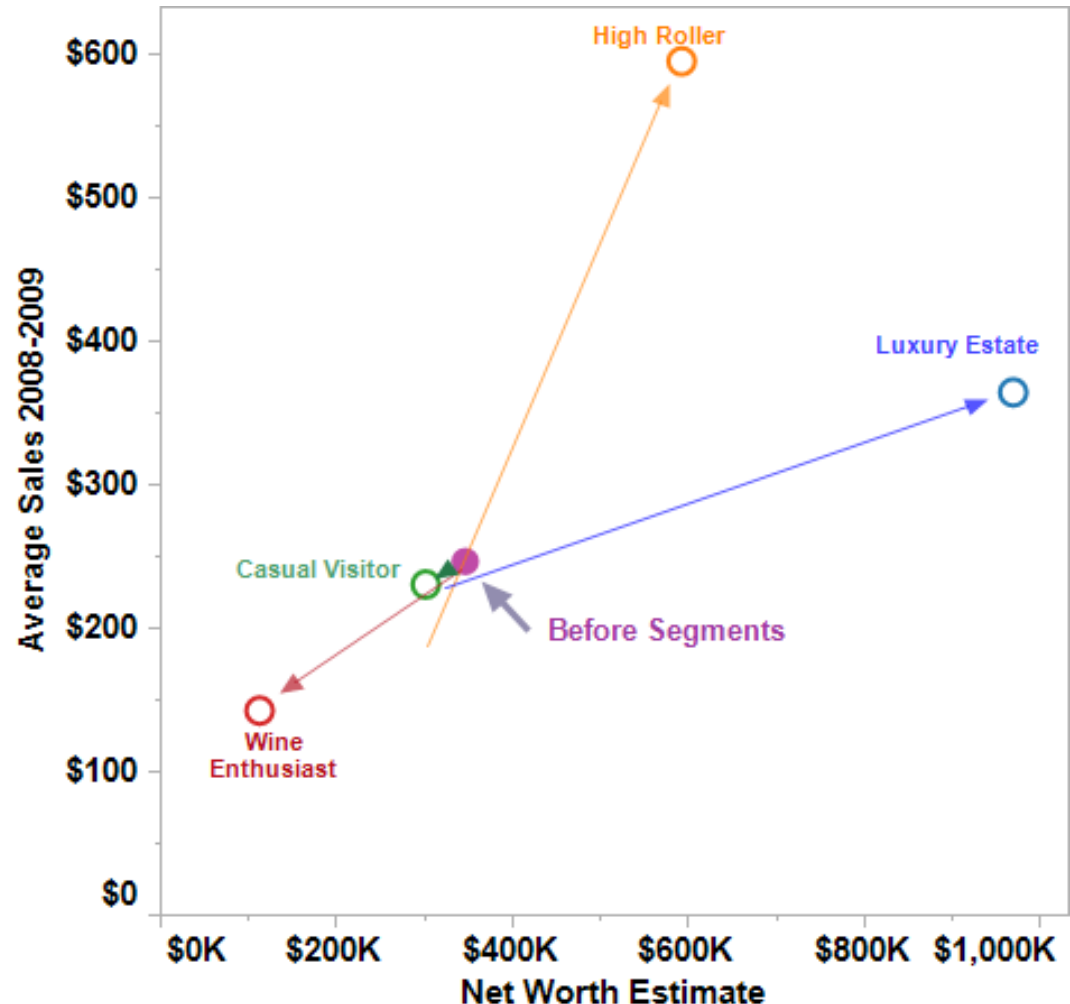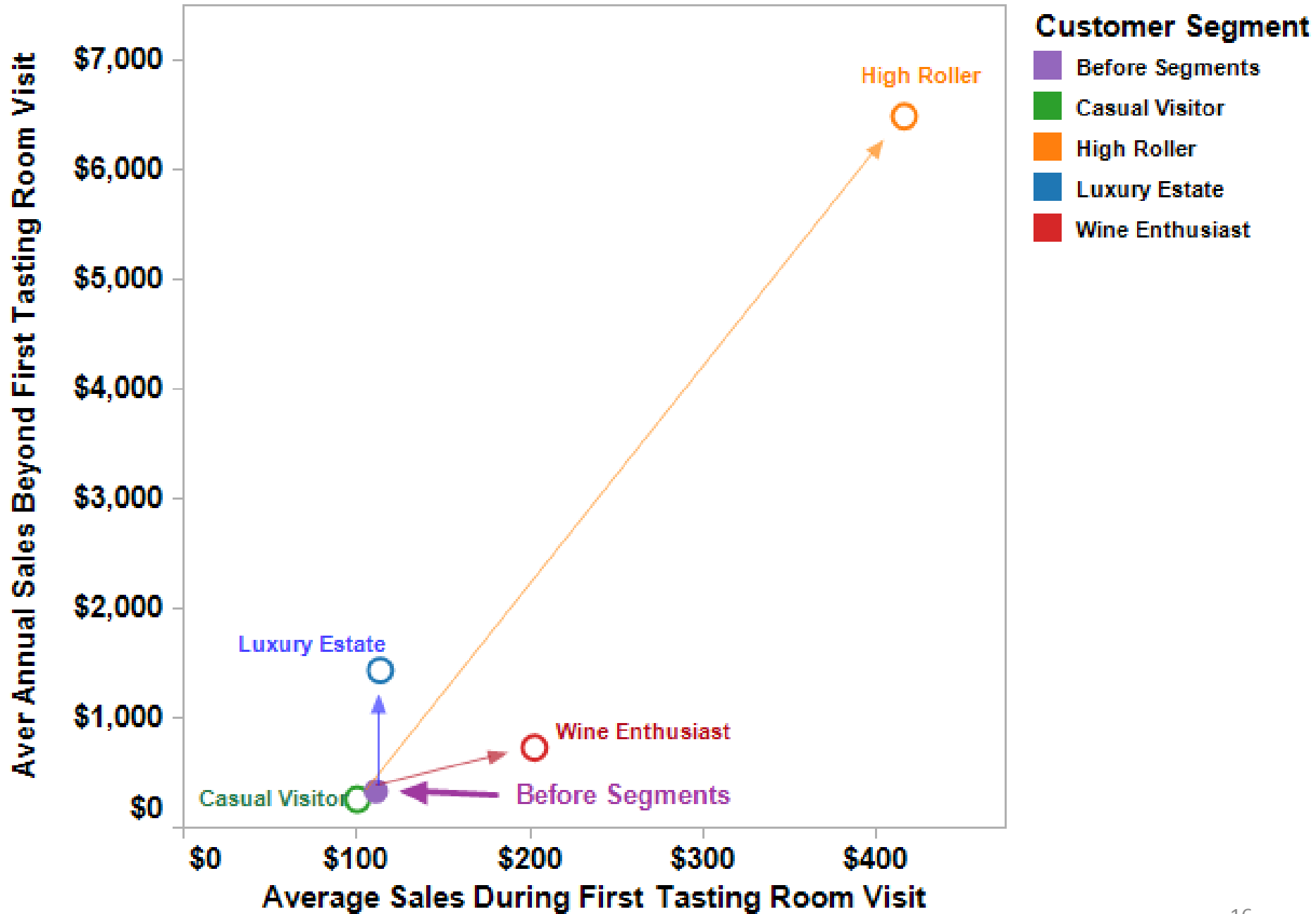
Enthusiast

Casual

High Roller

Luxury

Winery Customers Are Far from Average

- "Before Segments"
  - average customer
  - net worth of $350,000
  - winery sales of $250
  - similar to Casual Visitor

- Luxury Estate and High Roller are much wealthier than the average customer.

- High Roller spent the most by far.

Customer Segment
- Before Segments
- Casual Visitor
- High Roller
- Luxury Estate
- Wine Enthusiast

High Roller

Luxury Estate

Wine Enthusiast

Casual Visitor

Before Segments

Aver Annual Sales Beyond First Tasting Room Visit

Average Sales During First Tasting Room Visit

Who Should Get the Red Carpet in the Winery's Tasting Room?

- "Before Segments"
  - $100 in the first visit
  - $200 in the next year
  - Similar to Casual Visitor

- High Roller: Pull out all the stops!

- Luxury Estate needs personalized attention

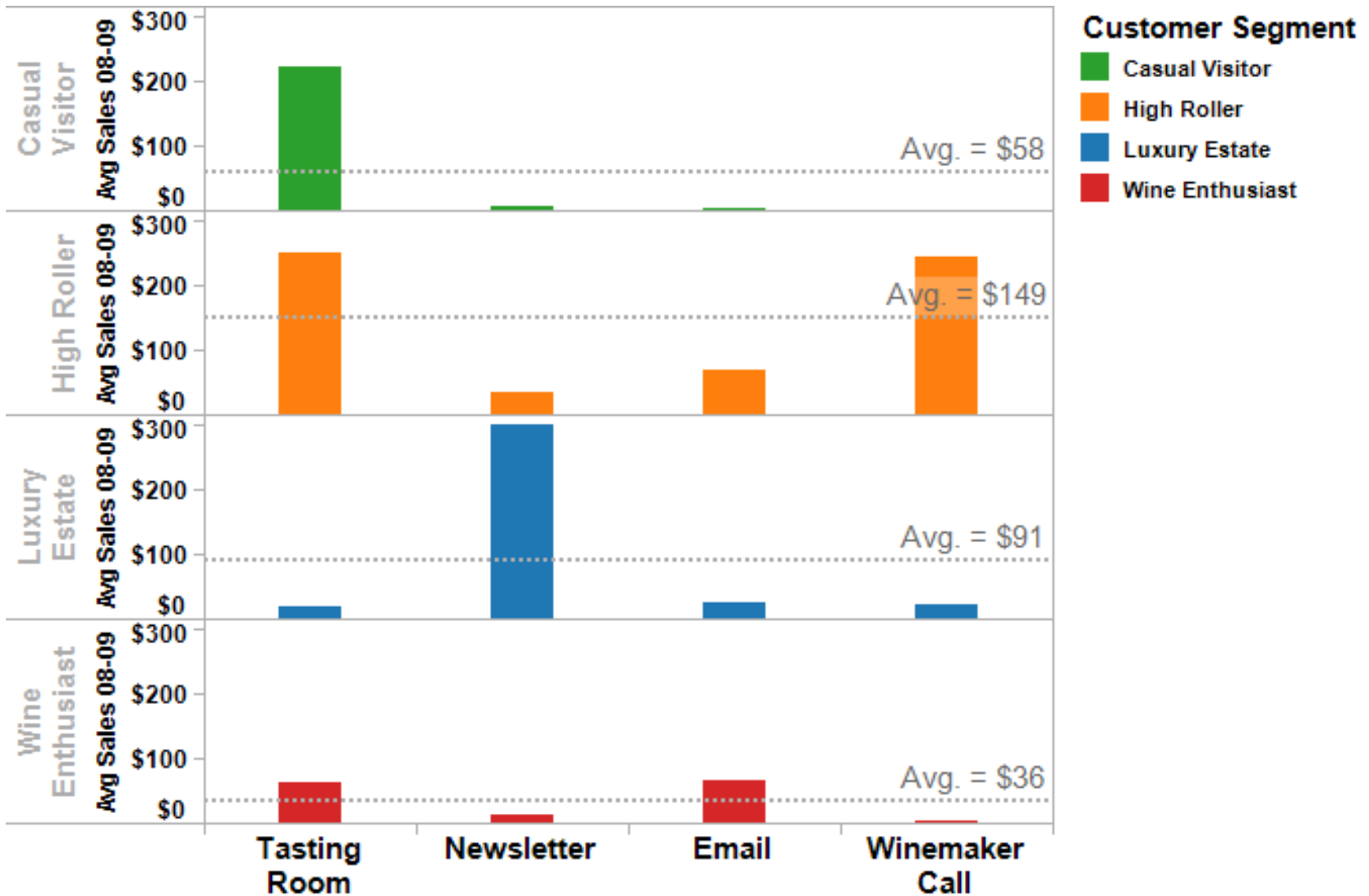- Mass marketing for Casual Visitor and Wine Enthusiast.
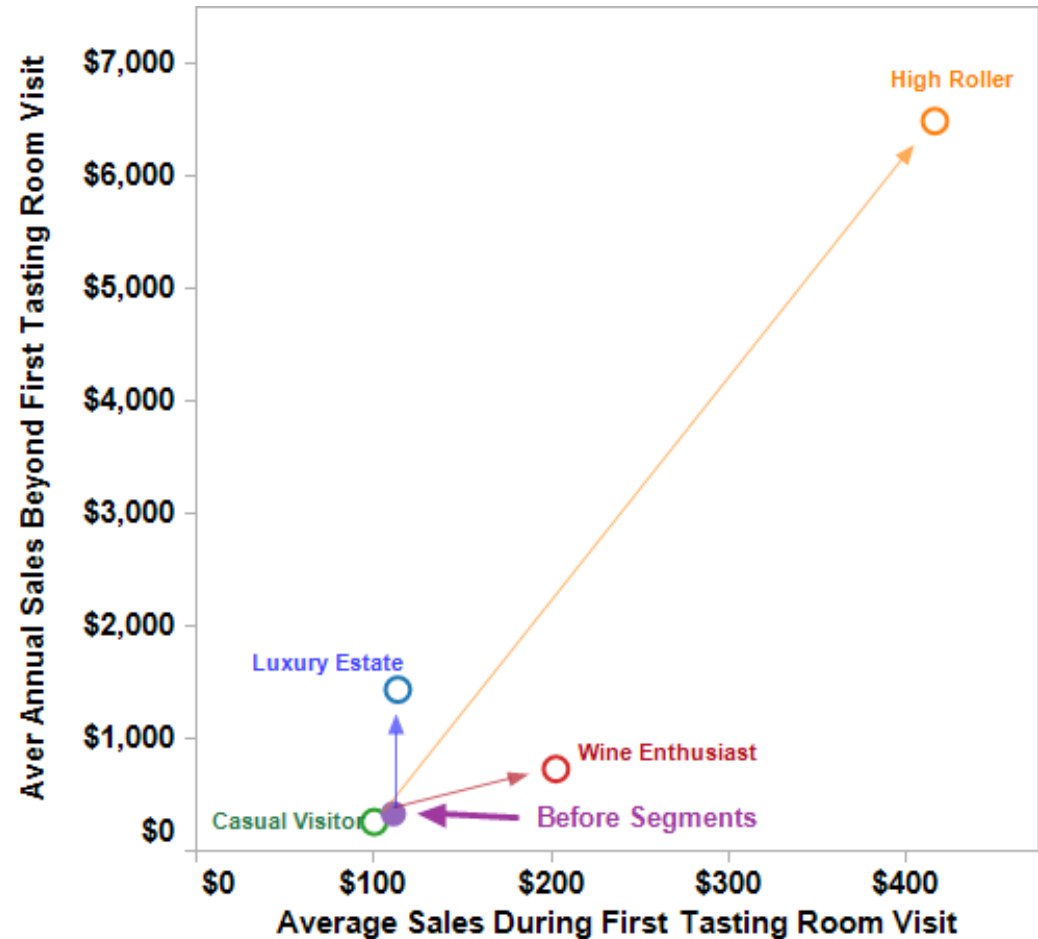
The Tasting Room Appears to Be Where the Action Is!
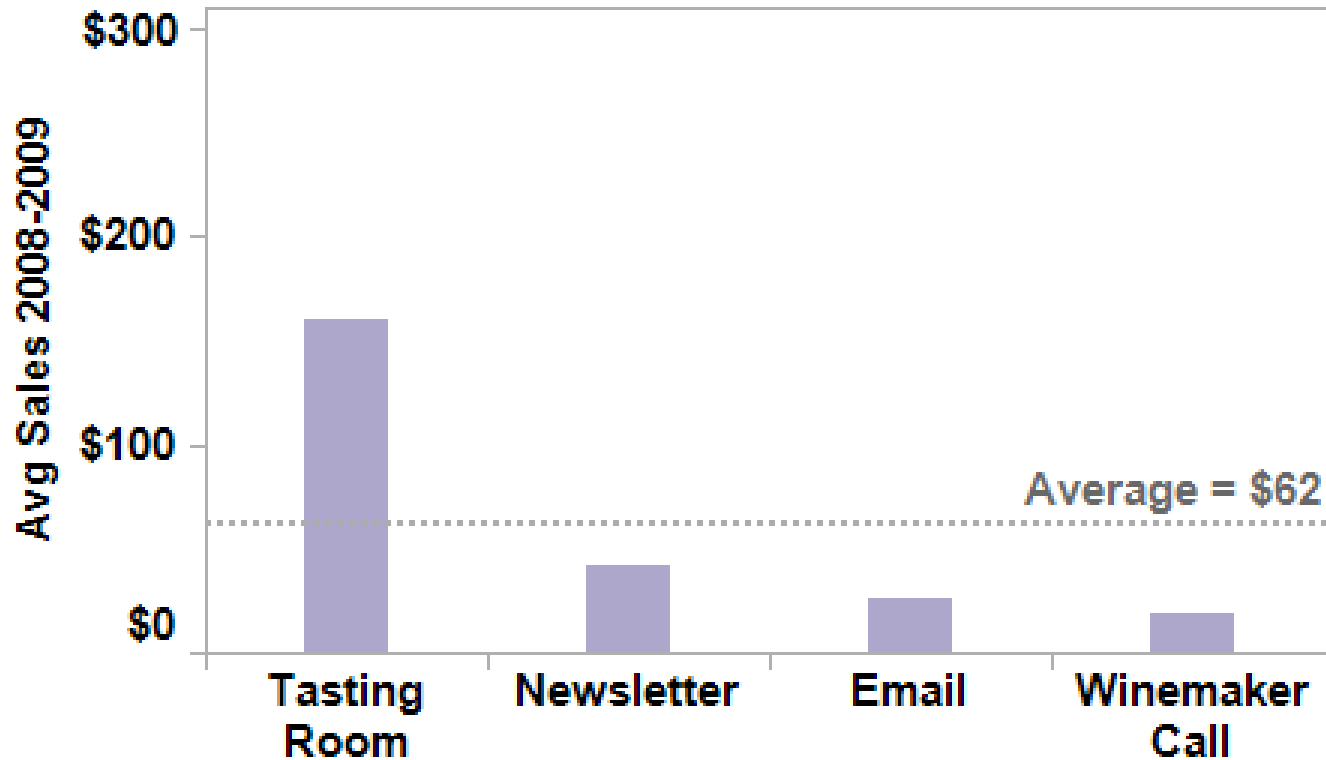
Not surprising- tasting room resulted in highest sales overall.

Different Channels for Different Segments

Save time and money- Target the right segments!

Customer lifetime value (LTV): Look beyond response rates into the future

- LTV is an estimate of future value based on prior behavior of the individual and similar customers

- Superior to response rates & recent purchase data

- LTV is:
  - Tactical -> used to develop a particular marketing campaign
  - Strategic -> measuring true impact of marketing programs on sales over time
  - Dynamic -> evolves with new data

The single purchase view


LTV- estimate the future

The Basics of LTV Modeling

- Simple to Sophisticated!
- Broad selection of customer behaviors can be used to estimate value
- Start with basic metrics and incorporate more advanced metrics (e.g., early adopters or potential to upgrade services)
- Each customer is assigned a value rather than a simple category
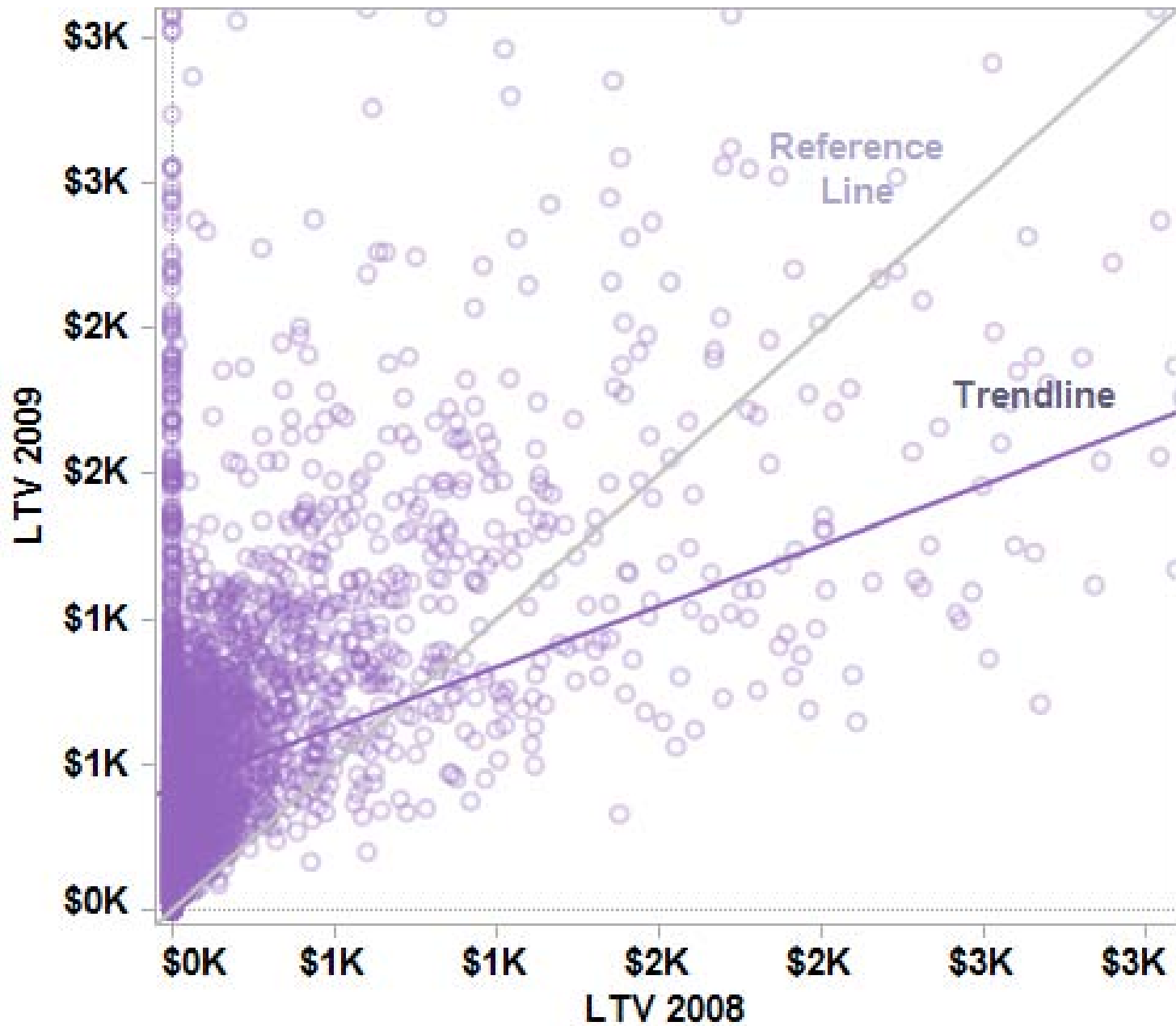- Possible analyses?
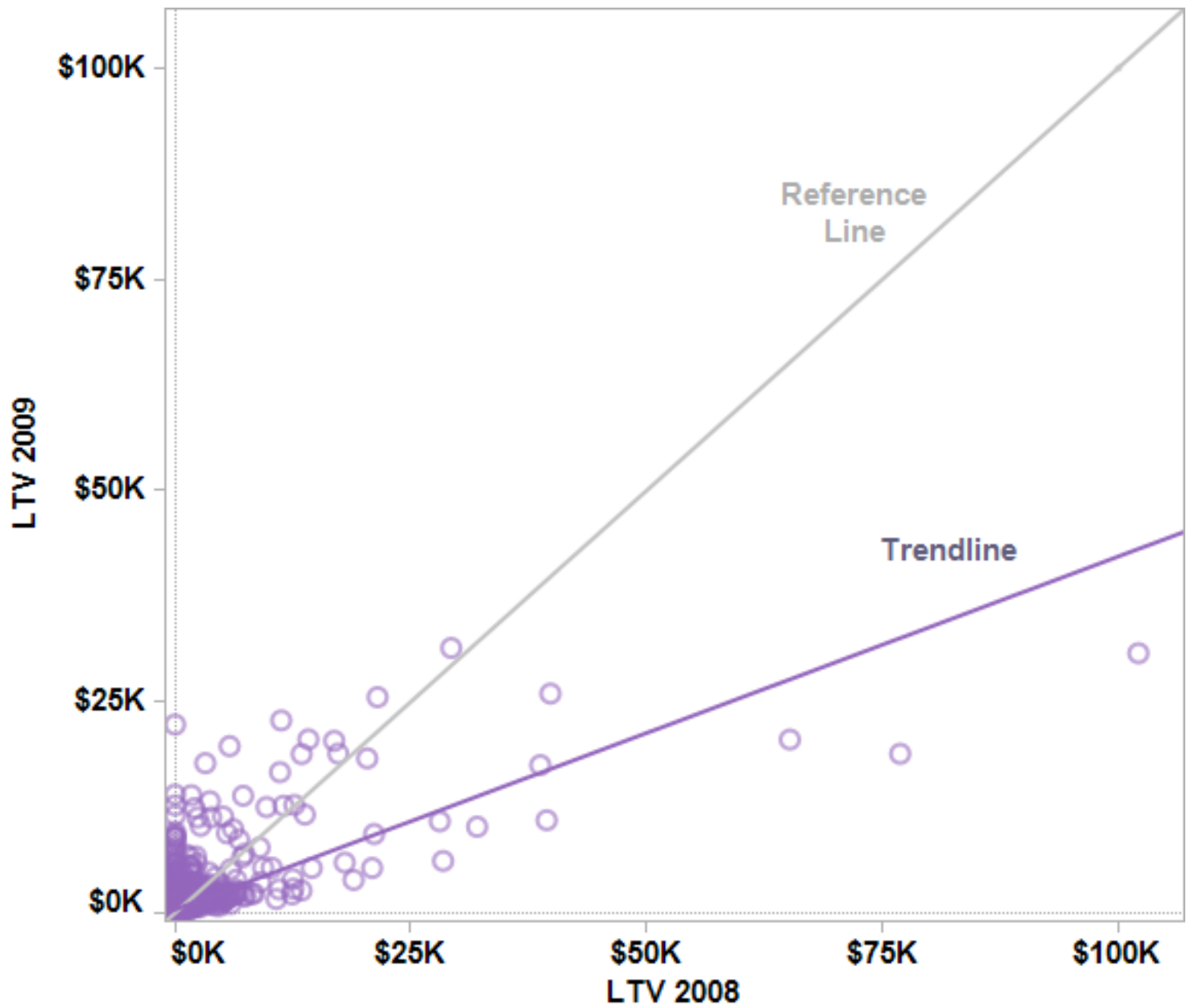
LTV of the Winery's Customer Base Decreased in 2009

- Overall, not good!!

- Exclude customers with LTV => 25,000, LTV increased

- Further analysis necessary
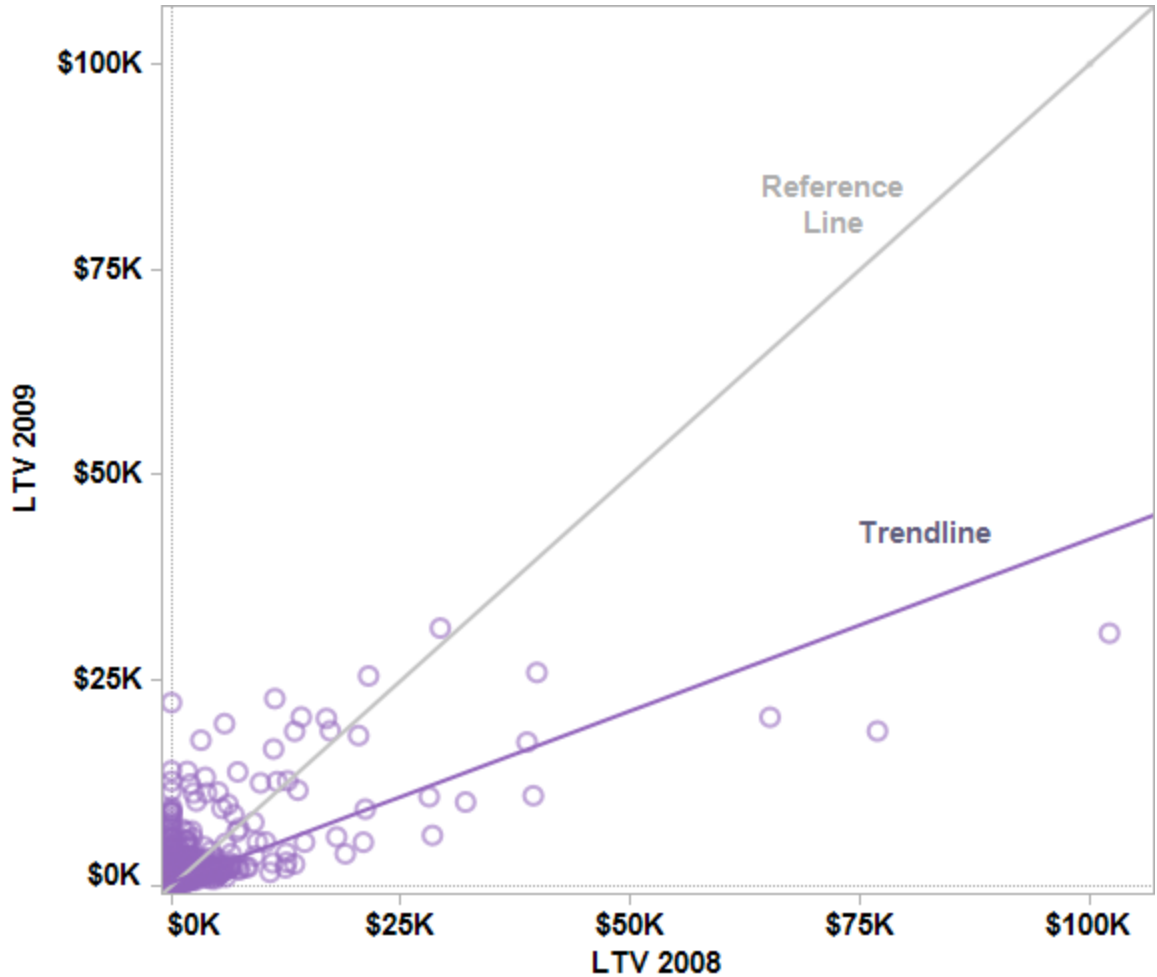
The Parts Are Greater than the Whole: Integration of Segmentation and LTV
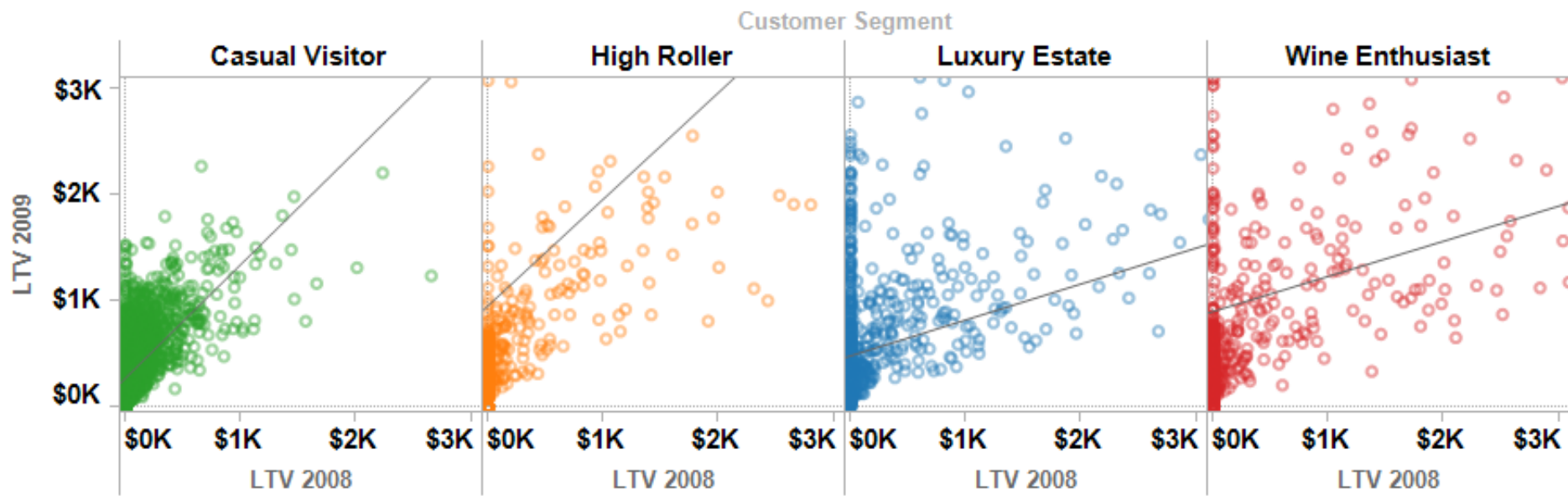
- Break down LTV by segment

- Create a multi-dimensional view of each customer

- Maximize ROI from marketing program

Zoom In on the Crowd- Lower LTV Customers!

- Zoomed in to LTV < $3000 (bulk of customers)

- LTVs for most customers increased

- Overall trend line doesn't show this- decreases in the high value customers pulled trendline down
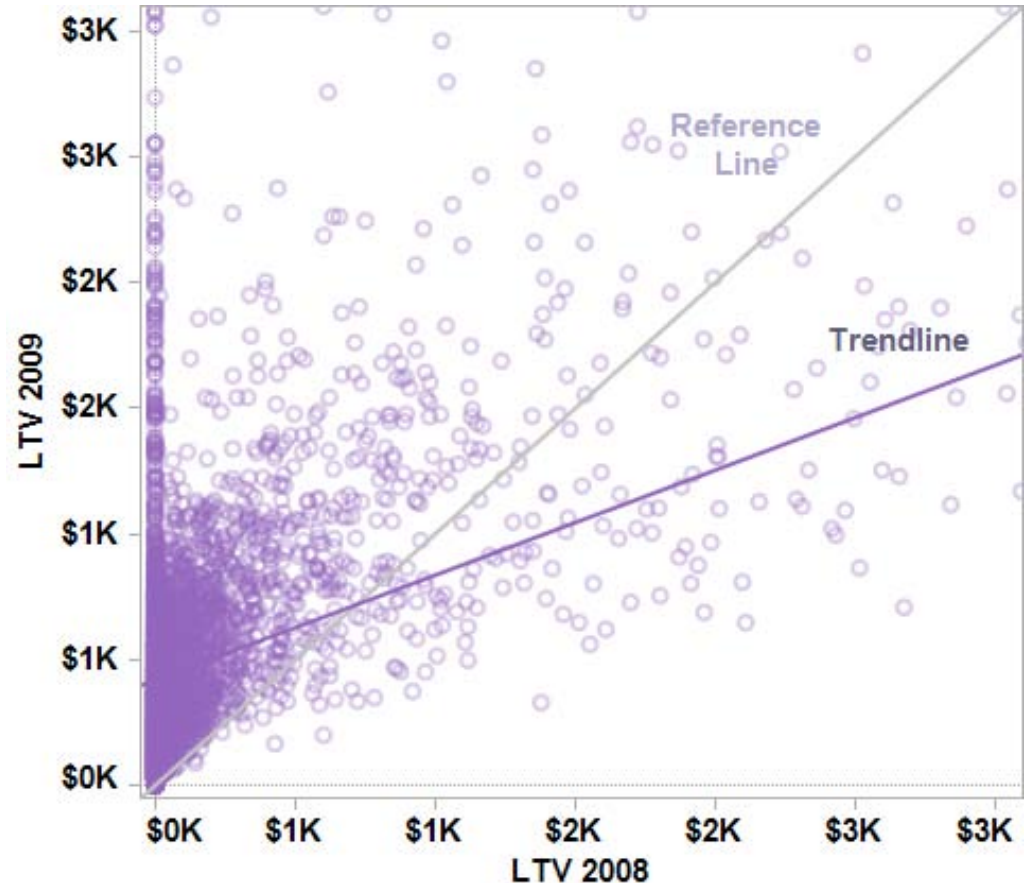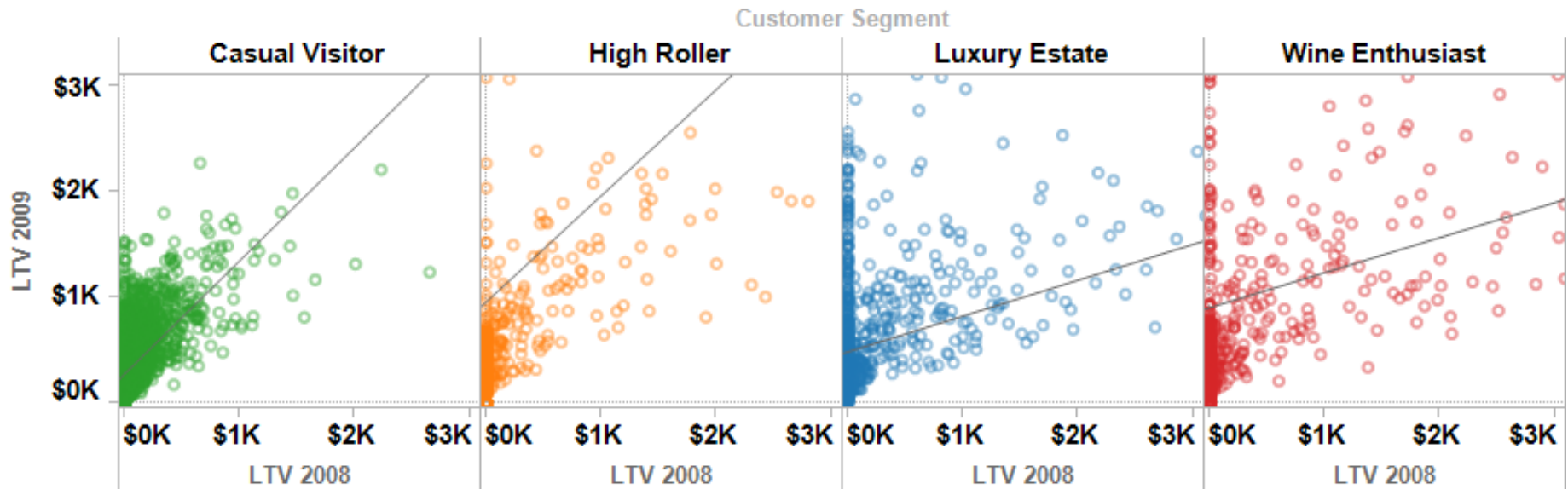
Casual Visitor and High Roller
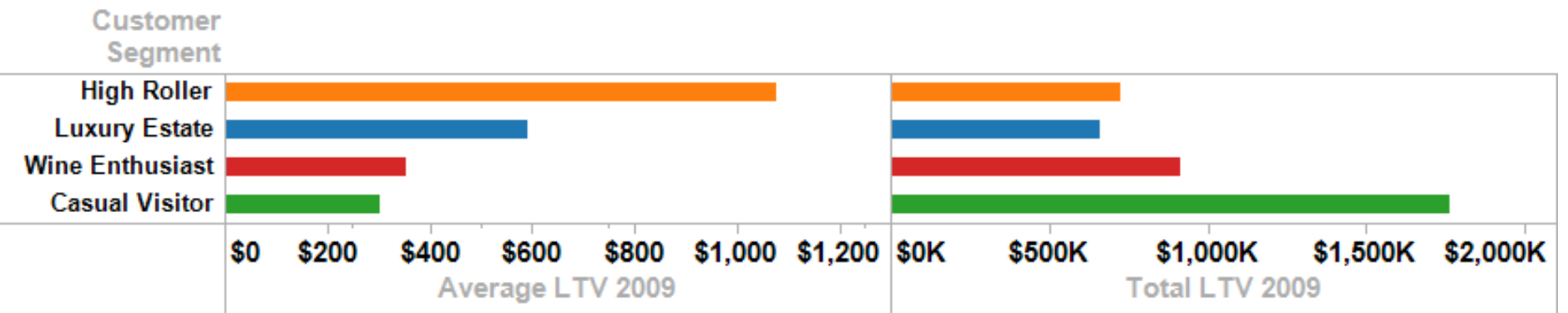# Look Good in 2009!

- Casual Visitor and High Roller Increased

- Luxury Estate and Wine Enthusiast decreased, especially in the high end of LTV 2008 (not shown here)

- *Crucial to develop different marketing plans for each segment

Customer Segment	Average LTV 2009	Total LTV 2009
High Roller	~$1,080	~$700K
Luxury Estate	~$590	~$650K
Wine Enthusiast	~$350	~$900K
Casual Visitor	~$290	~$1,800K

Customer Segment
- High Roller
- Luxury Estate
- Wine Enthusiast
- Casual Visitor

Treat High Rollers Right, but Bring In Casual Visitors by the Busload!
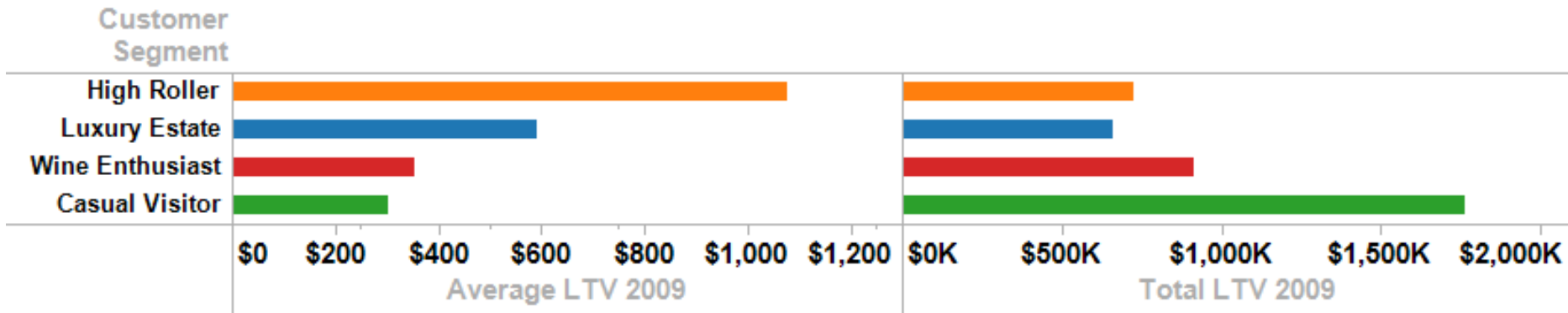
- Average LTV
  - potential value of an individual customer once he or she has been assigned a segment.
  - e.g., typical High Roller is most valuable customer, verifying customer segmentation analysis-> VIP treatment.
- Total LTV
  - highlights which segments (as a group) have the largest potential sales.
  - e.g., Casual Visitor is the most valuable group-> offer wine in bulk discounts, etc.

Call to Action: Divide and Conquer

- Casual Visitor: marketing efforts from 2008 to 2009 worked

- High Roller: efforts also successful; perhaps spend more per customer because they are worth more

- Luxury Estate: focus not only on obtaining, but also retaining customers

- Wine Enthusiast: other issues, e.g., will wait for discounts

Strategic Dashboard for Management

Customer Sales Dashboard for a Boutique Winery- from Freakalytics.com