

## Kaizen Thought Leadership: AN ACTIONABLE SOLUTION FOR SALES FORCE OPTIMIZATION

Is it true that if you want more sales, you need more salespeople? With no doubt more salespeople make more sales. But is that the only way to increase sales? What if you could drive higher sales with the same sales staff through better targeting the sales visits? With a Kaizen solution, sales force performance can be improved without adding more salespeople. Incorporating an optimization strategy into sales force analytics unlocks growth opportunities that are hidden in the sales force visit schedule. The sales visit strategy optimization can yield a 6% revenue uplift.

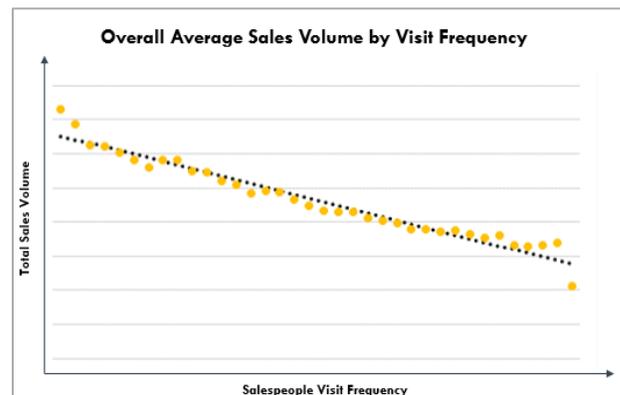
The Kaizen Approach combines scientific sophistication with actionable business benefit:

1. **Descriptive analysis of how the sales force drives volume during the proof of concept.** The “pre-game” is to confirm that sales volume and sales force visits are correlated to each other. This model validates the assumption and helps us understand the relationship between visits and sales.
2. **Perform “Big Data” driven market segmentation.** Segmenting customers reveals differences between groups, which helps build an accurate prediction model. It allows the model to differentiate strategies by customer characteristics.
3. **A data driven model that measures the salesforce impact on sales.** The model tracks sales force and volume relationships over time and combines model outputs from different levels into a business-intuitive sales visit strategy. This model is designed to predict customer reactions to salespeople visits at multiple levels of the customer hierarchy.

### 1. DESCRIPTIVE ANALYSIS AND PROOF OF CONCEPT

Our “Sales Visit Elasticity **KaizenValueAccelerator™** (KVA)” uses AI/ML algorithms, normalizes sales across a number of dimensions and quickly estimates the impact on sales volume from sales visit. After an initial data cleansing process, we built data-driven visualizations for understanding how salespeople visits drive the sales volume.

Without the descriptive analysis, the assumption that sales visits increase sales is only anecdotal and will remain theoretical. Data, however, tells the true story and proves that it is concrete and practical, which is the foundation of the following analysis. The graph on the right comes from one of our sales force strategy projects. It shows a significant negative relationship between visit frequency and sales volume.



Graph above shows the relationship between salespeople visit frequency versus sales volume. There's an obvious negative relationship between the variables.



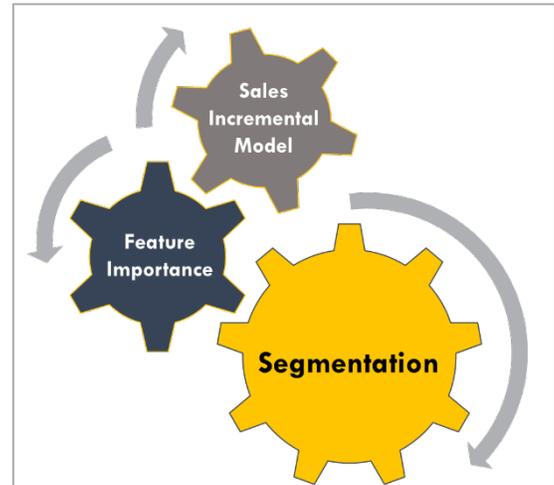
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**2. SMART SEGMENTATION**

Big data enables businesses to study geographic, demographic, behavioral and psychographic attributes in defining targeted sales strategies. To figure out the key drivers of sales, go through a feature selection process. By applying a tree-based approach, we quickly remove noisy variables to focus only on useful features.

With the selected variables, we divide the customers into discrete groups that share similar characteristics.

In order to identify and capture customer habits changing over time, we continuously bring new features into the machine learning segmentation process and update the segments.



**3. SALES VISIT IMPACT MODEL**

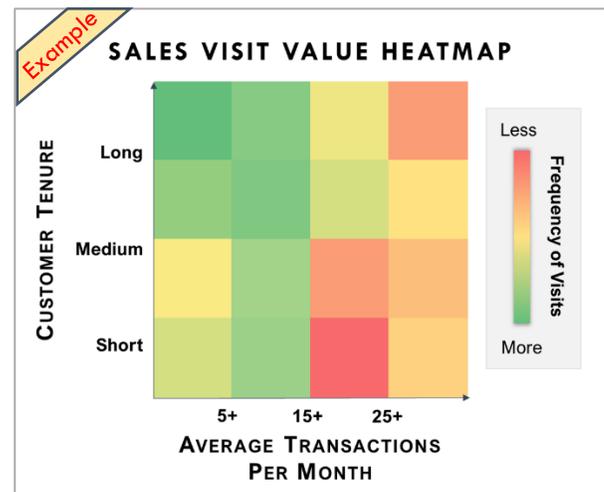
**Incremental Sales Estimate for Each Customer =**  
*Actual Sales Volume × Segment Specific Visit Benefit*

For each segment, an independent model is built to measure the impact of salespeople visit frequency on the total sales volume.

We use the formula above to measure the incremental sales for each customer by segment that benefit from the salespeople visits.

By understanding how customers are responding to the salespeople’s visits, we build an optimization model that determines when to visit and who to visit to maximize the sales.

Big data algorithms can dynamically allocate sales personnel to segments where best incremental sales opportunities exist. After the first version of the model was built increasing complexity to address routing constraints, personnel availability, elapsed time constraints and more operational challenges were integrated to provide actionable recommendations.



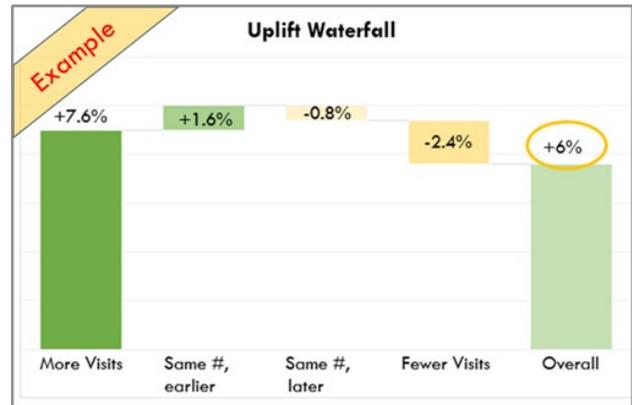
Graph above shows the relationship between salespeople visit frequency versus sales volume by segment. Difference in sensitivities are observed.



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**SUMMARY: RESULTS**

With the exact same numbers of visits in one month, the Kaizen solution generates 6% uplift of sales volume by adjusting visit frequencies and visit times. Because of reducing low value visits, 2.4% total sales reduced. However, the reduced low value visits are moved to high value customer, which generates a 7.6% increase in total sales. Similarly, there are some visits happens earlier and some must be later, trade off from these two is also positive. The graph to the right shows how this happens by trading off high value visits and low value visits.



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