Using Segmentation and Predictive Analytics to Combat Attrition

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Discussion Agenda

1. **Understanding Attrition**
   - What is Attrition?
   - How does it impact your business?
   - Analytical Tools to Combat Attrition
   - Building a Retention Framework

2. **Segmentation**
   - Segmentation and Modeling
   - Why is Segmentation important?
   - What to do/Not to do
   - Case Study

3. **Modeling and Marketing Framework**
   - Value of Predictive Modeling
   - Sales Predictor Model
   - Marketing Optimization Framework
   - Case Study

4. **Lessons Learned**
   - Key Takeaways
What is Attrition?

Attrition is simply described as when customers reduce their usage or completely stop using your products or services.
Why do we care about Attrition?

Types of Attrition

- Voluntary Attrition
- Involuntary Attrition
- Silent Attrition
- Balance Attrition
- Spend or Usage Attrition

How does it affect your business

- Cost to acquire a new customer is five times higher than retaining an existing one
- Top 30% of customers comprise 100% to 150% of your profitability
- 10% to 20% customers will attrite annually
- High attrition will impact growth - Relying on new customers is not a sustainable strategy

Typical Curve on Customer Attrition
(Excludes New Customer Sales)
What are we going to do about it?

**Analyze – Acquire Insight**

- **Identify** – Which of my customers are attriting?

- **Evaluate** – What is the magnitude of attrition?

- **Measure** – What is the financial impact or lost opportunity?

- **Monitor** – How is it trending?

**Action Plan to Combat Attrition**

- Market Research
- Segmentation
- Predictive Modeling
- Proactive Marketing & Retention Strategies

**TIP**

*Develop Analytical Tools and Strategies to combat attrition*
Building a Retention Marketing Framework

- Focus on retaining profitable customers

Combining Multiple Models

<table>
<thead>
<tr>
<th>Likelihood of Attrition</th>
<th>Profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>High</td>
<td>Green</td>
</tr>
<tr>
<td>Medium</td>
<td>Yellow</td>
</tr>
<tr>
<td>Low</td>
<td>Red</td>
</tr>
</tbody>
</table>

- **TIP**
  - Green: Maximize marketing spend, increase offers/contacts
  - Yellow: Optimize marketing spend - Drive customer engagement
  - Red: Limit Marketing Spend

Marketing Spend driven based upon Profit / Value
Segmentation + Modeling = Profitability

Segment 1: Highly Profitable
- Retain & Grow

Segment 2: Medium Profitability
- Drive Migration

Segment 3: Low Profitability
- Minimize interactions

Goals:
1. Reduce Attrition
2. Increase Sales, Profitability and ROI
3. Optimize Marketing Spend
Why is Segmentation Important?

- Defines a framework to develop an overall portfolio management strategy
- Helps to identify the most valuable & profitable customers
- More cost effective marketing through tailored programs / strategies
- Maximize ROI by deploying marketing dollars on the most productive segments
- Measures the impact of customer migration and campaign effectiveness
How to make Segmentation Work

Top 4 “Must Do’s”

• Integrate across all functional areas of business
• Segmentation tells you “what to do” not who to target
• Measure long term impact
• Needs and Attitudes is more actionable when combined with other types of segmentations

Top 4 “Don’t Do’s”

• Segmentation is only used for messaging
• Segmentation is only used as a targeting tool
• Measure short term impact
• Use Needs & Attitudes as the primary vehicle to define your strategy

Segmentation is a strategy that when applied correctly is a powerful tool
Case Study

- This Experimental Design included two cells with the same offer
- The only difference between the two test cells was the Model overlay on top of the segments

Segmentation + Modeling is the optimal customer treatment

TIP
Why is Predictive Modeling Important?

- Modeling allows us to predict the probability of an event occurring as a function of multiple factors.
- It models the relationship between an outcome variable and a set of explanatory variables of any kind.

Case Study on Spend Attrition

Target: Customers who are spending less year over year

No Model was used – point in time snapshot

Outcome:
Small Lift in sales per mailed

Target: Customers predicted to spend less year over year
Attrition model was used – Predicted future value

Outcome:
Significant Lift in sales per mailed

Financial Impact: Greater ROI & Incremental Sales
Current Value vs. Future Value: When to React

Target Attritors based upon Current Value

Sales for Customer A

- Business Tendency: Mail at Point of Attrition

Target Attritors based upon Future Value

Sales for Customer A

- What to Do: Mail at Predicted Point of Attrition
- Engage the customer before they are on a heavy downward slope

Proactively reengage customer
Sales Predictor Model

- Multiple Linear Regression Model – 11 significant variables
- Sales Predictor Model is designed to predict future spend migration
- Offer and contact strategy should be driven by predicted future value

**Spend Migration**

<table>
<thead>
<tr>
<th>Migration %</th>
<th>Best 74%</th>
<th>Med1 22%</th>
<th>Med2 3%</th>
<th>Low 1%</th>
<th>Total 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best</td>
<td>74%</td>
<td>22%</td>
<td>3%</td>
<td>1%</td>
<td>100%</td>
</tr>
<tr>
<td>Med1</td>
<td>22%</td>
<td>48%</td>
<td>24%</td>
<td>6%</td>
<td>100%</td>
</tr>
<tr>
<td>Med2</td>
<td>3%</td>
<td>24%</td>
<td>46%</td>
<td>27%</td>
<td>100%</td>
</tr>
<tr>
<td>Low</td>
<td>1%</td>
<td>6%</td>
<td>27%</td>
<td>66%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

- Proactively target Downward Migrators to prevent spend attrition ($$$)
  - Relevant & timely offers
  - Preferred Channel
  - Contact Strategy
  - Multiple Contacts

- Keep Best customers engaged ($)
- Proactively target customers to increase sales ($$)
- Drive Migration ($$)
# Marketing Optimization Framework

<table>
<thead>
<tr>
<th>Segments</th>
<th>Current Value</th>
<th>Share of Wallet %</th>
<th>Maintainer</th>
<th>Upward Migrator**</th>
<th>Downward Migrator**</th>
<th>Segment Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment 1 (6%)</td>
<td>High</td>
<td>70%</td>
<td></td>
<td></td>
<td></td>
<td>Retain &amp; Grow</td>
</tr>
<tr>
<td>Segment 2 (11%)</td>
<td>High</td>
<td>84%</td>
<td></td>
<td></td>
<td></td>
<td>Retain &amp; Grow</td>
</tr>
<tr>
<td>Segment 3 (24%)</td>
<td>Medium</td>
<td>76%</td>
<td></td>
<td></td>
<td></td>
<td>Migration</td>
</tr>
<tr>
<td>Segment 4 (12%)</td>
<td>Medium</td>
<td>56%</td>
<td></td>
<td></td>
<td></td>
<td>Manage Risk &amp; Credit Line</td>
</tr>
<tr>
<td>Segment 5 (17%)</td>
<td>Low</td>
<td>69%</td>
<td></td>
<td></td>
<td></td>
<td>Minimize Interactions**</td>
</tr>
<tr>
<td>Segment 6 (30%)</td>
<td>Low</td>
<td>55%</td>
<td></td>
<td></td>
<td></td>
<td>Minimize Interactions**</td>
</tr>
</tbody>
</table>

**Future Value**

* Based upon Sales Predictor Model

**Migration involves a 10% upward or downward movement in spend

## Marketing/Contact Strategy

<table>
<thead>
<tr>
<th>Marketing/Contact Strategy</th>
<th># of Contacts</th>
<th>Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention</td>
<td>6-8</td>
<td>DM, email</td>
</tr>
<tr>
<td>Maximize Marketing spend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>4-6</td>
<td>DM, email, statement</td>
</tr>
<tr>
<td>Optimize Marketing Spend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stimulation</td>
<td>6-8</td>
<td>DM, email, statement</td>
</tr>
<tr>
<td>Drive segment migration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>2-4</td>
<td>email, statement</td>
</tr>
<tr>
<td>Limit Marketing Spend</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Based upon Sales Predictor Model

**Migration involves a 10% upward or downward movement in spend**
**Business Problem:** Reduce Attrition in High Value Segments

**Channel:** Direct Mail

**Contact Strategy:** Multiple Contacts to targeted accounts – 4 touchpoints with customers

**Offers:** Reward Points, Spend & Get

**Targeting Strategy:** Target Profitable Segments & Overlay with Sales Predictor Model

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**Case Study**

<table>
<thead>
<tr>
<th>Segment</th>
<th>% of Customers</th>
<th>% of Profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20%</td>
<td>26%</td>
</tr>
<tr>
<td>2</td>
<td>26%</td>
<td>31%</td>
</tr>
<tr>
<td>3</td>
<td>31%</td>
<td>11%</td>
</tr>
<tr>
<td>4</td>
<td>10%</td>
<td>95%</td>
</tr>
<tr>
<td>5</td>
<td>13%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Segments 1 & 2 are losing money

Segment 4 drives 95% of the profitability

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**TIP**

Retaining profitable customers is a more effective strategy than acquiring new ones
Case Study Results

A group of predicted attritors was selected as a Universal control group (held out of all marketing)

**Lift in Activation**

Universal Holdout: 53%

Targeted: 60%

**Incremental Sales per Mailed**

Universal Holdout: $105

Targeted: $124

**Transactions per Mailed**

Universal Holdout: 2.8

Targeted: 3.8

**Instore Sales by # of Contacts**

1 contact & responded: $189

2 contacts & responded once: $249

2 contacts & responded twice: $256

3 contacts & responded once: $259

3 contacts & responded twice: $268

**Targeted vs. Universal Control**

Targeted customers are:

✓ Significantly more active

✓ Have higher spend

✓ Use their card more often
Lessons Learned

• Use Predictive Modeling to target attrition and maximize ROI

• Segmentation and modeling together will yield the strongest results

• Leveraging a multi-touch retention strategy will drive increased activation & sales

• Retaining profitable customers is the key to building a Retention Framework

• Universal Control Groups help measure the effectiveness & impact of marketing
Q & A