Customer Satisfaction Measures

Multivariate Solutions
Customer Satisfaction Performance Ratings

• Performance ratings create a variety of analysis possibilities:
  – Derived Importance (created using a dependent variable)
  – Correlations
  – Regression Analysis

• For a survey that includes stated or derived importance:
  – MATRIX Analysis
  – Quadrant Analysis
  – Stated vs. Derived Importance Analysis

• For Survey that includes competitor performance:
  – Head-to-head competitor analysis
  – Gap analysis
Example Survey Structure

• Company Customer Satisfaction (Performance)
  – Joe's Grub hamburgers are fresh, never frozen
  – Joe’s Grub steaks are prepared exactly as ordered
  – Staff is very attentive, in tune with your needs
  – Servers regularly suggest new items throughout the meal (appetizers, entrees, desserts).
  – Service is personalized, I feel like they know me
  – Joe's Grub is the place for me
  – Sandwiches and salads served by Joe's Grub are made to order

A survey might have this array of performance ratings, or ‘applies to’ check-offs.
Surveys Including Customer Satisfaction Ratings

• Correlation
  – The correlation coefficient, indicates the strength and direction of a linear relationship between two variables.
  – Those variables, in our case, are the dependent variables such as Purchase Intent, and company performance attributes.
  – It is between -1 and 1.

• Regression Analysis
  – Regression analysis examines the relation of a dependent variable (response variable) to specified independent variables (explanatory variables).
  – The dependent variable is something like Purchase Intent or Overall Satisfaction.
  – A Regression allows estimating the value of the dependent variable relative to the dependent variable.
  – In a regression, typical output highlights the significant variables. These are the ones that have a statistical impact on, say, ‘Overall Satisfaction’.
Surveys Including Customer Satisfaction Ratings

- Types of Dependent Variables
  - Purchase Intent
  - Likelihood to Recommend (or prescribe a medication)
  - Likelihood to Return
  - Number of Purchase Occasions

- More sophisticated approaches that should be suggested by Multivariate Solutions
  - MATRIX Analysis (Derived Importance vs. Performance)
    - Derived Importance is the association of performance attributes to a dependent variable derived by either correlation or regression analysis
  - Graphically displayed Regression Analysis

- Effective Uses
  - To determine which brand attributes, communications messages, drug effects are driving the dependent variables.
Surveys Including Surveys Including Customer Satisfaction Ratings Ratings

**Snack Food Test**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Barbecue Curls</th>
<th>Mustard Pretzels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Intent</td>
<td>Barbecue Curls</td>
<td>Mustard Pretzels</td>
</tr>
<tr>
<td>Good for me, wholesome</td>
<td>0.60</td>
<td>0.66</td>
</tr>
<tr>
<td>It is a brand I trust</td>
<td>0.52</td>
<td>0.62</td>
</tr>
<tr>
<td>It is a treat for me/my family</td>
<td>0.48</td>
<td>0.66</td>
</tr>
<tr>
<td>It is for people like me</td>
<td>0.45</td>
<td>0.73</td>
</tr>
<tr>
<td>It is a brand for kids</td>
<td>0.41</td>
<td>0.58</td>
</tr>
<tr>
<td>Brand with vitamins</td>
<td>0.37</td>
<td>0.56</td>
</tr>
<tr>
<td>It is a modern, up-to-date, contemporary brand</td>
<td>0.35</td>
<td>0.63</td>
</tr>
<tr>
<td>It is a high quality brand</td>
<td>0.31</td>
<td>0.60</td>
</tr>
<tr>
<td>It is original, different</td>
<td>0.21</td>
<td>0.67</td>
</tr>
<tr>
<td>Are high quality products</td>
<td>0.20</td>
<td>0.71</td>
</tr>
<tr>
<td>Are for someone like you</td>
<td>0.20</td>
<td>0.71</td>
</tr>
<tr>
<td>Fun to eat</td>
<td>0.19</td>
<td>0.68</td>
</tr>
</tbody>
</table>

The above correlation is testing snack attributes against Purchase Intent. The new product, ‘Barbecue Curls’, have low correlations for quality, differentiation, and fun.

The established product, ‘Mustard Pretzels’, has stronger associations with purchase intent.
### Surveys Including Customer Satisfaction Ratings

**Regression Analysis**

<table>
<thead>
<tr>
<th>Joe's Grub</th>
<th>Standardized Coefficients</th>
<th>Beta</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall, how satisfied are you with your past dining experience at Joe’s Grub?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A blue jeans kind of place</td>
<td>0.34</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>A place for lunch with co-workers</td>
<td>0.23</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Warm, inviting feels like home</td>
<td>0.15</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Comfortable and casual like an old friend</td>
<td>0.12</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>No frills, no charm, just the essentials</td>
<td>0.05</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>For people like me</td>
<td>0.04</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>Romantic, intimate, has some charm</td>
<td>-0.01</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>Rowdy, noisy, feels like a party</td>
<td>-0.07</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td>A dressy kind of place</td>
<td>-0.17</td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>[NOT] Go there to see and be seen</td>
<td>-0.23</td>
<td>0.06</td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Overall, how satisfied are you with your past dining experience at Joe’s Grub?

The above regression tests personality performance drivers for Joe’s Grub. Positive attributes are shaded in gray. They are ‘drivers’—or brand equity—for Joe’s Grub.

Negatively significant variables are important as well. They are shaded in peach. They are negative Brand Equity. When interpreting a negatively significant variables, place a [NOT] in front of it. For example, Joe’s Grub is NOT a place to go and be seen.
Regression can also be shown in graphic form.
The blue dotted lines indicate statistical significance.
MATRIX Analysis

**Target Issues**

- These are "Target Issues" to improve brand equity. The brand is performing below average and these attributes are important.

- These attributes are not crucial. Immediate focus should be on brand attributes.

**Strengths**

- These are the "Primary Strengths" of the brand.

- Consumer concerns are being met, though these attributes are not important for brand equity. Potential for resource misallocation.

**Secondary Opportunities**

- These are the "Target Issues" to improve brand equity. The brand is performing below average and these attributes are important.

- These attributes are not crucial. Immediate focus should be on brand attributes.

**Potential Advantages**

- These are the "Primary Strengths" of the brand.

- Consumer concerns are being met, though these attributes are not important for brand equity. Potential for resource misallocation.
The MATRIX above compares Derived Importance (using correlation) with top box customer satisfaction ratings for Joe’s Grub.

**TARGET:** The restaurant needs to target personalized service.

**SECONDARY:** Joe’s Grub is not known for its steak.
Customer Satisfaction Ratings

- Survey Includes Competitor Performance
  - Competitive Issue Targeting
  - Gap analysis
  - Correspondence maps
Competitive Issue Targeting

- **Critical Weaknesses**
- **Parity Issues**
- **Leverageable Strengths**

Impact on Loyalty:
- Stronger
- Weaker

Attribute performance:
- Worse
- Better

- **Brand underperformance**
- **Brand parity**
- **Brand performs better than competition**

Secondary Weaknesses

- **Low Priority Issues**
The Competitor Analysis adds an extra dimension to the MATRIX (direct comparison with a competitor).

A point made in the above example shows that ‘Have accessible Sales people’ is, for CLIENT, highly correlated with Purchase Intent, but that COMPETITOR beats him at it.
Gap Analysis
CLIENT vs. Competitor

You do not have to shake the vial or cartridge
No mixing is necessary before using
The medication is taken once per day
You can choose your own time to take your shot
There is little or no pain when injecting the medication
You do not experience side effects from the medication
The medication is easy to use
You do not need to refrigerate—once you open them
You do not have nighttime hypoglycemia / low blood sugar
You do not feel tired when you are on the medication
You do not have daytime hypoglycemia / low blood sugar
The medication is covered by insurance

Here, a simple gap shows that CLIENT has an advantage when it comes to mixing the medication, but COMPETITOR is covered by insurance.
Importance and Customer Satisfaction Ratings

• Survey Includes Both Importance and Performance Scores
  • Stated vs. Derived Importance
    – Derived Importance is the *association* of performance attributes to a dependent variable *derived* by either correlation or regression analysis
  • Traditional Quadrant Analysis
<table>
<thead>
<tr>
<th>Stated Importance</th>
<th>Derived Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Added Benefits</td>
<td>Key Selling Points</td>
</tr>
<tr>
<td>(Primary opportunity areas)</td>
<td>(Primary areas to maintain)</td>
</tr>
<tr>
<td>Low Priority</td>
<td>Essential Support Points</td>
</tr>
<tr>
<td>(Secondary opportunity areas)</td>
<td>(Potential Differentiators)</td>
</tr>
<tr>
<td></td>
<td>(Potential Overinvestments)</td>
</tr>
</tbody>
</table>
### Stated vs. Derived Importance

**Total Sample**

<table>
<thead>
<tr>
<th></th>
<th>Derived Importance (Correlation)</th>
<th>Stated Importance Top 2 Box (6 7) Percentage</th>
<th>Derived Importance Class</th>
<th>Importance Class</th>
<th>IT Class</th>
<th>IMP Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>j</td>
<td>0.391</td>
<td>80%</td>
<td>High</td>
<td>High</td>
<td>Key Selling Point</td>
<td>1</td>
</tr>
<tr>
<td>b</td>
<td>0.350</td>
<td>67%</td>
<td>High</td>
<td>Low</td>
<td>Value Added Benefit</td>
<td>2</td>
</tr>
<tr>
<td>f</td>
<td>0.295</td>
<td>96%</td>
<td>High</td>
<td>High</td>
<td>Key Selling Point</td>
<td>3</td>
</tr>
<tr>
<td>e</td>
<td>0.292</td>
<td>52%</td>
<td>High</td>
<td>Low</td>
<td>Value Added Benefit</td>
<td>4</td>
</tr>
<tr>
<td>a</td>
<td>0.283</td>
<td>92%</td>
<td>High</td>
<td>High</td>
<td>Key Selling Point</td>
<td>5</td>
</tr>
<tr>
<td>c</td>
<td>0.280</td>
<td>95%</td>
<td>High</td>
<td>High</td>
<td>Key Selling Point</td>
<td>6</td>
</tr>
<tr>
<td>h</td>
<td>0.229</td>
<td>67%</td>
<td>Low</td>
<td>Low</td>
<td>Low Priority</td>
<td>7</td>
</tr>
<tr>
<td>n</td>
<td>0.191</td>
<td>82%</td>
<td>Low</td>
<td>High</td>
<td>Essential Support Point</td>
<td>8</td>
</tr>
<tr>
<td>l</td>
<td>0.185</td>
<td>79%</td>
<td>Low</td>
<td>High</td>
<td>Essential Support Point</td>
<td>9</td>
</tr>
<tr>
<td>g</td>
<td>0.175</td>
<td>85%</td>
<td>Low</td>
<td>High</td>
<td>Essential Support Point</td>
<td>10</td>
</tr>
<tr>
<td>d</td>
<td>0.154</td>
<td>36%</td>
<td>Low</td>
<td>Low</td>
<td>Low Priority</td>
<td>11</td>
</tr>
<tr>
<td>k</td>
<td>0.151</td>
<td>60%</td>
<td>Low</td>
<td>Low</td>
<td>Low Priority</td>
<td>12</td>
</tr>
</tbody>
</table>

**Mean** 0.248 74%

**Min** 0.15093503 36%

**Max** 0.39055717 96%

Note: Importance is Derived From Syrup Performance correlated with Syrup 'Arriving as Ordered'

This is Stated vs. Derived Importance in Excel. Key Selling Points are Highlighted.
Derived versus Stated Importance

JOHNSTONE JOHNSTONE

Graphical display of Stated vs. Derived Importance.

Value Added Benefits

Key Selling Points

Low Priority

Essential Support Points

Derived Importance

Stated Importance

- Has knowledgeable customer service
- Has customer assistance to help me during and after my acquisition
- Has customer service that is accessible while I am in the midst of finalizing major purchase
- Has friendly customer service
- Has customer service that will resolve any issues I have
- Has responsive customer service
Quadrant Analysis

**Key Vulnerabilities**
(Primary opportunity areas)

**Strategic Advantages**
(Primary areas to maintain)

**Potential Vulnerabilities**
(Secondary opportunity areas)

**Potential Advantages**
(To Different Market Segments)

*Potential Differentiators*
(If Properly Marketed)

*Potential Overinvestments*
**Client Company Quadrant Analysis**

**Key Vulnerabilities**  
(Primary opportunity areas)

- Quality Of Contract Sales Force

**Strategic Advantages**  
(Primary areas to maintain)

- Speed Of Putting A Sales Force Together  
- Meeting Agreed Upon Objectives For Physician Call Activity  
- Flexibility In Meeting Your Needs

**Potential Vulnerabilities**  
(Secondary opportunity areas)

- Strategic Marketing Expertise  
- Therapeutic Expertise  
- Meeting Agreed Upon Sales Or Market Share Objectives

**Potential Advantages**  
(Potential Differentiators if properly marketed otherwise over-investments)

- Breadth Of Services
BUYER Segments

- BUYER Segments are a quick add-in when conducting consumer testing for products such as:
  - Consumer Goods
  - Food & Beverage
  - Electronics & Computers
- Multivariate Solutions could suggest these four questions as an addition to any survey involving these categories.
BUYER Overview

Rational

Emotional

Decision Dominance

Uncertainty Tolerance

Low  High

Product Analysts

High-Stakes Gamblers

Typical Information Seekers

Comfort/Consistency Seekers

Impulse Buyers
Survey Structure

- On a scale of 1-to-5, how much do you agree with the following statements?
  - I may not know a lot about a product before I buy it, but that is okay (reversed scaled).
  - It would really bother me if I didn’t understand some information about a product.
  - Price always determines what Brand I buy.
  - I don’t have a problem changing what I buy.
• The BUYER Matrix shows the proportion of the consumer base falling into respective areas.

Rational

Uncertainty Tolerance

Low

Emotional

High

Decision Dominance

Product Analysts

7%

Typical Information Seekers

40%

Comfort/Consistency Seekers

16%

Impulse Buyers

25%

High-Stakes Gamblers

12%