Brush Floss

Mock-up

CAD Model
Risks

**Key Risk:** Is the Brush ‘n’ Floss as effective as the two products separately?

**Secondary Risks:** Safety & Ease of Use
Technology

Sonic Brush
- Electromagnetic oscillator
- Water-sealed inductive charging system

Oral Irrigation
- Piston pump
- Pressure control system
Step 1: Rinse and Sanitize
Testing Results

Top and Middle Removed Most Plaque
Percentage of Plaque Removed

- Top: 64.6%
- Middle: 67.5%
- Bottom: 56.1%
- Sonic Brush: 56.2%

Before and After images of teeth.
# Product Contract

<table>
<thead>
<tr>
<th>Customer Need</th>
<th>Product Attribute</th>
<th>Engineering Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness – Long term</td>
<td>Long term gum health</td>
<td>Improves gum health in 14 days</td>
</tr>
<tr>
<td>Effectiveness in Plaque Removal</td>
<td>Bristle speed</td>
<td>31,000 brush strokes per minute</td>
</tr>
<tr>
<td>Ergonomics handheld brush</td>
<td>Weight</td>
<td>Total weight under 16 ounces</td>
</tr>
<tr>
<td>Needs to be Rechargeable</td>
<td>Power</td>
<td>7 days per charge cycle</td>
</tr>
<tr>
<td>Water Efficiency</td>
<td>Capacity</td>
<td>800 ml of water per session</td>
</tr>
<tr>
<td>Time Efficiency</td>
<td>Time</td>
<td>2-minute timer</td>
</tr>
<tr>
<td>Extensive product life</td>
<td>Time durability</td>
<td>2 years or more product life</td>
</tr>
</tbody>
</table>
Customers

Under 25
• Develop good habits

Between 25 – 65
• Higher marginal value
• Can afford it

Over 65
• Possible loss of dexterity

yellow a
Next Steps

- Full Integration
- Larger reservoir (2 min of water)
- More dental expert & user input
- Fluoride-based solution
- Possible water suction for excess water