Survey Use & Design
Customer Satisfaction Surveys

- Random sampling for large customer base.
  - May “stratify”: group according to criteria.
  - Formulae for sample size to get statistical validity.

- Exhaustive sampling for small customer base.

- Some survey data collection techniques:
  - Face-to-face interviews: can provide clarifications
  - Telephone interviews: cheaper, less effective
  - Questionnaires: low response rates, danger of “self-selection”

- Too many surveys can be irritating.

- Timing of survey affects responses!
The Steps in a Survey Project

- Establish the goals of the project - What do you want to learn?
- Determine your sample - Whom will you interview?
- Choose interviewing methodology - How will you interview?
- Create your questionnaire - What will you ask?
- Pre-test the questionnaire, if practical - Test the questions.
- Conduct interviews and enter data - Ask the questions.
- Analyze the data - Produce the reports.
Survey Objectives

- Important to be clear about survey objectives:
  - “Formative”: Purpose is to serve as a guide for improvement.
  - “Summative”: Purpose is to evaluate the outcome.

- Formative surveys need to pinpoint reasons behind dissatisfaction.
  - Impacts question choices.
  - Need to relate questions & responses to actions.
    - If the response is X, what will be done?
    - Need more open-ended questions.

- Summative surveys need considerable attention to minimizing bias and maximizing validity.

- Specific objectives: What aspects do we want to know about?
Survey Design

- The design of the survey can heavily influence the results
  - Wording of the question may introduce biases
  - Set of response choices provided may push towards some responses, limit the possible answers, or confuse the responder
  - Order of questions may “habituate” responders or set contexts that determine responses
  - Length of survey may determine level of attention paid, and whether the survey gets responded to (KISS)

- Good resource on survey design:
  - [http://www.surveysystem.com/sdesign.htm](http://www.surveysystem.com/sdesign.htm)

- Specifically about designing web surveys:
  - [http://lap.umd.edu/survey_design/guidelines.html](http://lap.umd.edu/survey_design/guidelines.html)
Interviewing Methods

- Personal Interviews
- Telephone Surveys
- Mail Surveys
- Computer Direct Interviews
- Email Surveys
- Web Surveys
- Scanning Questionnaires

[Creative Research Systems]
Survey Analysis

- Indicate sample size.

- May cluster responses for ease of presentation.
  - E.g. Combining “satisfied” and “very satisfied” may simplify picture.

- Present information in ways that highlight significant results:
  - Does “neutral” get clubbed with “satisfied” or “dissatisfied”?
  - Percent dissatisfied is useful if percent satisfied is high.
    - Difference between 95% satisfied and 98% satisfied is significant.
  - Histogram of satisfaction on different quality attributes.
    - But some attributes may be much more critical!
  - Use colors to highlight small-but-significant items, such as “did not use”

- Summarize write-in comments.

- Cross-check with personal feedback!
## Bias Examples

<table>
<thead>
<tr>
<th>Sample</th>
<th>Probable Bias</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Customers</td>
<td>Favorable</td>
<td>They would not be your customers if they were unhappy, but it is important to know what keeps them happy.</td>
</tr>
<tr>
<td>Your Ex-Customers</td>
<td>Unfavorable</td>
<td>If they were happy they would not be ex-customers, but it is important to know why they left you.</td>
</tr>
<tr>
<td>“Phone-In”</td>
<td>Extreme Views</td>
<td>Only people with a strong interest polls in a subject (either for or against) are likely to call in - and they may do so several times to load the vote.</td>
</tr>
<tr>
<td>Daytime</td>
<td>Non-Working</td>
<td>A majority of people who are at home during Interviews the day do not work. Their opinions may not reflect the working population.</td>
</tr>
<tr>
<td>Internet</td>
<td>Atypical People</td>
<td>Limited to people with Internet access. Internet users are not representative of the general population, even when matched on age, gender, etc. This can be a serious problem, unless you are only interested in people who have Internet access. In many business surveys this limitation might not be a problem. Another concern is that respondents have been known to complete multiple surveys to sway results, unless the software prevents this.</td>
</tr>
</tbody>
</table>

- Source: http://www.surveysystem.com/sdesign.htm
Metrics

- Trends in customer satisfaction.
  - Individual elements may be more informative than just satisfaction data.

- Comparisons across products.
  - Especially if same survey questions used.

- Volume of customer complaints.

- Market share trends.
  - Measures value proposition + perception, not just satisfaction

- Actual % of repurchase, % of customers buying based on recommendations
  - (Common survey questions: Overall satisfaction, Willingness to repurchase, Willingness to recommend)
Limitations

- Customer satisfaction is not the ultimate goal.
  - Need to focus also on value proposition, perceptions.

- Results are very dependent on the questions asked and the timing
  - Using the same instrument consistently helps.

- Tradeoff between marketing / perception management and not setting expectations too high.

- Surveys have many built-in limitations.
  - For example, customers telling you what you want to hear/ using it as a forum to vent.
  - Balance with other ways to gauge satisfaction.

- Customer satisfaction survey results are often a marketing tool.
  - Creates strong incentive to try and manipulate for favorable results!

- Overall satisfaction has many factors: very crude indicator.
  - Good satisfaction numbers can paper over many real problems.
Summary

- Customer satisfaction is the ultimate measure of quality.

- Surveys are the most common way to measure satisfaction.
  - Survey design is complex and critical.

- Satisfaction depends on product quality, support, but also expectation setting.

- Customer satisfaction surveys are most commonly formative.
  - Identify opportunities for improvement.