How to Create a Powerful Survey

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Who Am I?

• Educated at Georgetown University (Psychology and Economics) and University of Rochester (Graduate School—Business Administration and Clinical Psychology)

• Career at Xerox: VP, Worldwide Marketing and Product Launch
  • Master Black Belt

• Community Board President

• Instructor at Saunders College of Business
So you want to know....

- How a process is working
- How people feel about your product or service
- How people feel about a recent change
- What opinions and perceptions people have about a specific offering or event or activity
Objectives for our time together

We will consider:

• When is a survey your best tool?
• Where do you start?
• How do you construct a good survey to meet the objectives?
• How ensure you find the right participants?
• What are pitfalls to stay far away from?
Do you really need to do a survey?

• Best for large groups of respondents or when you do not need follow up probes to questions
• Beneficial if you want segmented questions and answers to certain groups
• Useful when you want to pre-test and see if you need to go deeper
• Do not use open-ended questions as a substitute for conversations
• Can be a great intro to focus group work
How will you get survey participants?

- Revisit the objectives and the audience?
  - Get to your own base: captive in the seat or in your mailing list
  - Get to a new base: rented, borrowed or open
  - Get to an open base: put it out there and see who is interested
  - Don’t turn a survey into a marketing tactic

- What is the likely response rate?
  - Email clickthrough responses are likely to be below 3% at best
  - People in a room are much higher but they fear being ‘found out’; bias toward positive answers

- Are you giving a small incentive to participate?
  - Give-away
  - Drawing
  - Information
  - Beware of cognitive dissonance
What do you want to know?

- Know your survey objectives
- Be sure they are measurable
- You cannot know it all from one survey
- Test the instrument with the stakeholders—buy in is important
- Survey time 3 minutes or less—or even less—is clearly better

Objective: to assess the level of perceived customer satisfaction with our patient login process for those between 30 and 45 who have logged in within the last 2 weeks to understand if changes should be considered.

- You don’t want to know what they thought of the prior login process
- You aren’t asking if they like your hours or your location or if the doctor was friendly
- You aren’t inquiring if the nurse was competent
Response Rates and Types of Surveys

**AVERAGE SURVEY RESPONSE RATE BASED ON SURVEY METHOD**

<table>
<thead>
<tr>
<th>Survey Method</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Person Survey</td>
<td>57%</td>
</tr>
<tr>
<td>Mail Survey</td>
<td>50%</td>
</tr>
<tr>
<td>Average Survey Response Rate</td>
<td>33%</td>
</tr>
<tr>
<td>Email Survey</td>
<td>30%</td>
</tr>
<tr>
<td>Online Survey</td>
<td>29%</td>
</tr>
<tr>
<td>Telephone Survey</td>
<td>18%</td>
</tr>
<tr>
<td>In-App Survey</td>
<td>13%</td>
</tr>
</tbody>
</table>

**SOURCES:**
(1) https://www.fieldboom.com/blog/survey-response-rate/
(2) http://www.pewresearch.org/2017/06/15/what-low-response-rates-mean-for-telephone-surveys/
(3) https://www.genroe.com/blog/acceptable-survey-response-rate/11504
(6) https://www.officevibe.com/blog/employee-surveys-infographic
(7) https://academic.oup.com/pq/article/75/2/249/1860211
(8) https://www.promoter.io/blog/increase-survey-responses
Confidence Interval and Level....say what?

• Using a **correct survey sample size** is crucial
  • too big will lead to the waste of precious resources such as time and money
  • too small will not allow you to gain reliable, predictable insights

• Should you survey 1%, 5%, 10%, ... of your population?
  • How closely you want your results to match those of the entire population?
  • How accurate do you want your data to be?

• **Margin of error (or confidence intervals)**
  • In short, this is the positive and negative deviation you allow on your survey results for the sample—from the opinion of the entire population.
  • By example, you set your margin of error on 5% so that 90% of your survey respondents like your product
  • A 5% margin of error means that you can be ‘sure’ that between 85% (90%-5) and 95% (90%+5) of the entire population actually likes your product

• **Confidence level**
  • Tells you how often the percentage of the population that likes your product actually lies within the boundaries of the margin of error.
  • By example, how sure you can be that between 85% and 95% of the population likes your product
  • If you chose the 95% confidence level then 95% of the time between 85% and 95% of the population likes your product
Hold on….don’t panic…..

- We don’t need a PhD in Statistics
- There are calculators for this: https://www.checkmarket.com/sample-size-calculator/

<table>
<thead>
<tr>
<th>Population size</th>
<th>Confidence level = 95%</th>
<th>Confidence level = 99%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Margin of error</td>
<td>Margin of error</td>
</tr>
<tr>
<td>100</td>
<td>5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>500</td>
<td>217</td>
<td>377</td>
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<tr>
<td>1,000</td>
<td>278</td>
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<tr>
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<td>1,532</td>
</tr>
<tr>
<td>1,000,000</td>
<td>384</td>
<td>1,534</td>
</tr>
</tbody>
</table>
What information will be most useful?

- Be rigorous about the core information you really need to have versus what would be nice to get
- Test to ensure that there is a reason for every question that ties directly to your survey objectives
- Balance your information needs with the ‘real estate’ of your service—if it is too long you won’t get responses anyway
- The more people who see the survey draft the more questions you will be encouraged to add
- If you cannot take any action from the data you collect, be sure you really need to ask for it (e.g. How would you rate the government’s immigration process?)
Types of Questions

• Use response scales when possible but literature shows you probably want to ask each question separately
  • Respondent fatigue can grow higher with a long set of matrix questions
  • Fatigue can be higher for mobile surveys where the grid is small and users rush, leave or just ignore
  • Use a midpoint (odd number of responses) to ensure the entire range is covered
  • Get to the variance to uncover how people are really thinking
  • When asking individual questions with a scale, you can be even more precise and research shows respondents take a bit longer to consider each question
Are you biased?

• Don’t lead the witness
• Don’t force an answer
• Don’t omit an answer you don’t want
• Don’t give your respondents a reason to just abandon or opt out

We are thought to be the most unbiased news in the state. How often would you say our reporting is unbiased?
- Never unbiased
- Rarely unbiased
- Once in a while
Tips for great questions

• Don’t use too many open ended questions
  • Research shows leaving room for comments at the end is preferable
  • Too many comment sections within the survey can frustrate respondents and cause them to leave before done

• Don’t ask many binary questions: Agree/Disagree, Yes/No; True/False
  • These are quick but don’t tell you why people think the way that they do—you will want to know more
  • Could use a nested bridge question(s) but sometimes this causes early departure
  • Best is to use the Likert scale
Begin with the end in mind

• Think of what you could do with the responses
• Consider any data that would be missing and prevent you from taking action
• Be sure the answers provided will help you make the decision about what to do
• Use your respondent’s language so they understand and don’t misinterpret
• Don’t try to get every question answered or people will not answer the instrument
Try it out and see if you get what you really want

- Never do a survey without testing it out first
- Provide the sample survey exactly as it will be seen by the respondents you want to reach
- Don’t tell the test base what you are doing BUT ask them for feedback later
- Probe for problems with jargon, language or terms that they will not understand
- Don’t assault someone’s intelligence
Collect and analyze the data

• Do you want statistical accuracy or just a pulse?
• Are the survey stakeholders biased to believe or doubt?
• Will the package you choose help you tabulate and display the results?
• Then, is your data fully exportable?
• Did you promise to return any finding to the survey participants?
• Is there anything shocking that requires more insight?
Now what to do?

- Before you change a process or even product, be sure you have the appropriate amount of data to take action.
- Share some interesting findings back to your population if you want to call upon them again.
- Don’t claim statistical significance if you don’t have it but:
  - Take the trends seriously
  - Use them to do deeper dives with a new survey
  - Show that you act on good data
What ever could go wrong?

• Respondents use a smartphone and the instrument is optimized for pc only
• The server goes down
• They hate your offering and get all their friends to tell you (e.g. United Airlines)
• Your survey is too long and respondents abandon
• Your language is confusing—double negatives and jargon
• You ask demographics at the beginning and create anxiety
• You ask open ended questions that tire the respondent
Anonymous or not?

• If you are anonymous you want to stay anonymous
• Give option to provide name and contact information at the end but be sure not to require or probe for it
• If you are providing an incentive, consider what that could do to anonymity
• Yes-people with issues are more likely to want to remain anonymous
• But-if they have an issue and raise it, they want follow up
What to do in place of a survey?

• A Focus Group—not statistical but more personal and targeted
• Interview or Conversation—not statistical but a very adaptive way to get information
• Watch a Behavior unobtrusively
• Do a Scatterplot of Observances
  • How many people come in between 9AM and 11AM?
  • Can be very useful but be sure data is reliable and repeatable
Wrapping It Up—The Top 10

1. Be Clear About Survey Objectives
2. Make Sure That Every Question Is Really Necessary
3. Do a Test Survey
4. Use Your Respondent's Language
5. Keep it Short and Simple--Ask Direct Questions
6. Only Ask One Question at a Time
7. Avoid Leading or Biased Questions
8. Avoid Using Grids or Matrices for Responses
9. Don’t Use Binary Questions
10. Reflect Appropriate Findings
How RIT can help you....

• Take a great class on campus ...
• Survey Design
  • $695-20% for alumni
  • Class includes:
    • Survey planning
    • Sample design and selection
    • Survey instrument design
    • Data collection methods
    • Analysis and reporting
    • Application areas discussed will include program evaluation, opinion polling, customer satisfaction, product and service design, and evaluating marketing effectiveness.
    • Data collection methods will include face-to-face, mail, Internet and telephone.
  • https://www.rit.edu/kgcoe/cqas/other-training/survey-design-measuring-satisfaction-and-loyalty
Questions

• And some answers
  • Or Great Discussion
Need to talk more?

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https://www.rit.edu/kgcoe/cqas/lean-six-sigma/

Thanks.......