



PLTW Engineering

12/Customer Driven Design

April 16, 2020



12/EDD

Lesson: **4/16/2020**

Objective/Learning Target: Students will be able to explain how to engage potential customers within the target market of a product through the use of surveys.



Where do I start?

News media, government agencies and political candidates need to know what the public thinks.

Associations need to know what their members want.

Large companies need to measure the attitudes of their employees.



Where do I start?

Knowing what the client wants is the key factor to success in any type of business.

The best way to find this information is to conduct a survey.



Surveys

The first step in any survey is deciding what you want to learn.

Create a list of items you want to know categorized by different groups or stakeholders whom you are trying to engage.

We call these the Goals of the surveys.



Goals

The goals of the project determine whom you will survey and what you will ask them.

If your goals are unclear, the results will probably be unclear.

Some typical goals include:

- The potential market for a new product or service
- Ratings of current products or services



Goals

Other typical goals might include:

Customer satisfaction level

- Reader/viewer/listener opinions
- Association member opinions
- Opinions about political candidates or issues
- Corporate images
- Employee attitudes



Identifying the Target Audience

Who's input are you trying to get?

- Consumer
- End user
- Manufacturer
- Wholesaler/retailer/distributor



Identifying the Target Audience

The main components in determining whom to survey:

If you conduct an employee attitude survey or an association membership survey, the population is obvious.

If you are trying to determine the likely success of a product, the target population may be less obvious.

Correctly determining the target population is critical.

If you do not interview the right kinds of people, you will not successfully meet your goals.



Methods of distributing a survey

To gather your information, consider the following methods:

- Phone Interview
- Face to face Interview
- E-mail
- Snail mail



Questionnaire Design

First and foremost, the K.I.S.S. - Keep it simple, stupid mindset is critical when writing the survey questions, but other considerations must be made.

Design to fit the medium:

- You cannot show pictures during a phone interview
- Mailed surveys cannot ask the responder for clarification
- Allow for “don’t know”, “not applicable”, and “no opinion”
- Use “other” or “none of the above”
- Keep it as short as possible



Question Types

There are five basic question types:

- Multiple choice
- Numeric open-ended
- Text open-ended
- Rating scales
- Agreement scales



Ordering of Survey Questions

You should take significant time to layout the order of the questions in your survey.

Typically;

- Pleasant, easy questions first
- Group questions by topic
- Difficult, sensitive questions last



Ordering of Survey Answers

Arrange the answers to ease the difficulty of the question.

- Agree \Rightarrow Neutral \Rightarrow Disagree
- Positive \Rightarrow Neutral \Rightarrow Negative
- Excellent \Rightarrow Neutral \Rightarrow Poor



General Tips

Arrange the answers to ease the difficulty of the question.

- Explain why you are gathering information
- Assure anonymity
- Make it look appealing



Helpful Links

[SurveyMonkey best practices and guidelines](#)

[Science based guide to creating quality surveys](#)