

Market Research

Trainer

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Cofinançat per
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Subvencionat pel Departament d'Empresa (**Programa Primer**) i amb el cofinançament del Fons Social Europeu Plus



Market Research Training Topics

Training Session II

- Questionnaires
- Sampling Techniques
- Measuring and Scaling
- Questionnaire Preparation

Purpose of Research

He who asks is a fool for five minutes.
He who does not asks is a fool forever.

Chinese Proverb

What Do You Understand For Qualitative Research?

What Can You Get from Qualitative Research?

Qualitative research is a type of research method that focuses on understanding and interpreting **social phenomena through non-numerical data**. It emphasizes capturing the perspectives, experiences, and meanings of participants in their natural settings.

Qualitative research shares these characteristics:

- seeks **answers** to predominantly open-ended questions
- **systematically** uses a predefined set of procedures to answer these questions in smaller sample size
- collects **evidence that provides for better in-depth understanding**
- **Wider knowledge of cultural and social context**
- produces findings that were **not determined in advance**
- produces findings that are applicable **beyond the immediate boundaries of the study**

It provides information about the “human” side of an issue – that is, the often contradictory behaviors, beliefs, opinions, emotions, and relationships of individuals.

Additionally, it seeks to understand a given research problem or topic from the perspectives of the local population it involves. Qualitative research is especially effective in obtaining **culturally specific information** about the values, opinions, behaviors, and social contexts of particular populations.

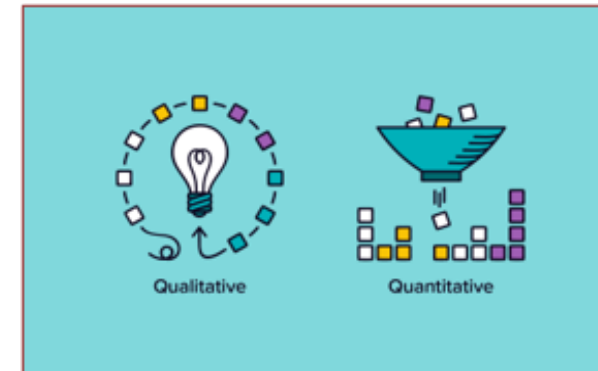
Quantitative research

The main characteristics, as the name suggests, is to describe a particular marketing phenomenon. **How consumers behave and think, feel?**

When we wish to know:

- **Who** are our customers?
- **What** brands they buy?
- **What** quantities they buy?
- **Where** they buy the brands?
- **When** they shop?
- **How** they found our products?

Descriptive research is desirable when we wish to project research finding to a larger population (if the sample is **representative**).



Cross-Sectional Research

- The **most common** marketing research studies
- They have a **single data collection point**
- Sample population is measured only in one point in time
- One single **snap-shot** (photograph) of the **population**
- Normally employs a **large sample size**



For example, when a you want to know what customers think about the brand.

Sample Survey –

is a cross sectional research who's sample is drawn in such a way to be representative of a specific population.

Pros - it is fast, easy, it gives quick overview

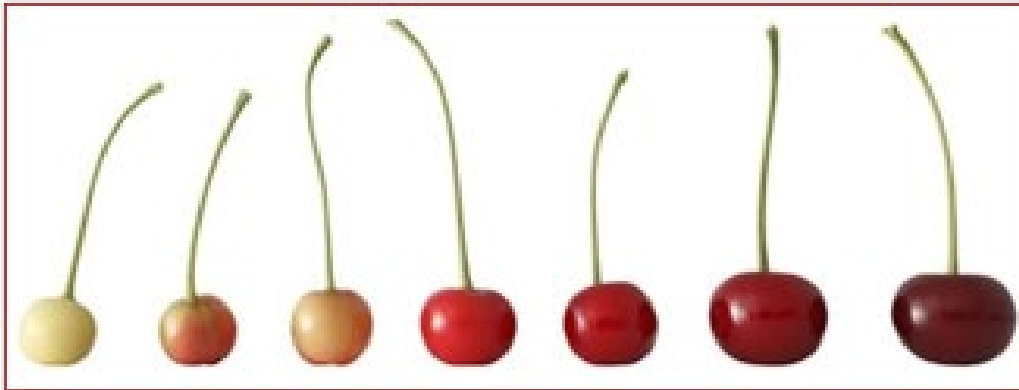
Cons - it won't tell the general pattern, it could be misleading

"Photo of a population"

- Cross-sectional studies measure units from a sample at one point in time. (e.g. magazine readership)

Longitudinal Research

- The main difference is that there are **multiple data collection points**
- The **same sample units of population** participate over a period of time
- The same members of a sample are called **a panel**
- It is like a movie or a **video of population**



Longitudinal Research

- Longitudinal studies measure units from a sample during a longer period of time. It repeats observations of the same individual over time. (e.g. Low carb diet)
- Longitudinal studies are time-consuming and often **more expensive** than other types of studies, so they require significant **commitment** and **resources** to be effective.

Longitudinal Research

There are two types of longitudinal research studies (panels):

Continuous (True) panel - There are **exactly the same participants** participating in the reserach.

They are asked **exactly the same questions**.

Example - Exactly the same hotel guests that are repetitive guests.

Challenge – Maintain and stimulate people to particiate.

Discontinuous (Omnibus) panel - **different questions in each data collection stage.**

That is the most typical in marketing.

Panels

Panels are **sample units** who have **agreed to respond to questions** at **periodic intervals**.

- **Continuous** panels – ask participants always the same questions. (grocery shopping)

Pros - if the same group of respondents report their purchases continuously over a longitudinal period, we can determine repeat purchases and brand switching behavior.

Cons – difficult to manage.

- **Discontinuous** panels – vary questions from one panel measurement to the next.

Discontinuous panels are also called **omnibus panels** (multi-thematic).

Omnibus means "including or covering many things or classes"

- Descriptive research can be **qualitative** and **quantitative**.

Descriptive Research Pros and Cons

Pros: It is fast to do, to set up & collect data.

It provides making specific predictions.

It provides statistical data.

It allows managers to have an overview of a pattern of consumers perceptions.

Cons: Negative side is even though we have a general overview, we do not know the details.

For example **WHY** the satisfaction with service is lower or higher. (exploratory research)

We do not have cause and effect relationships. (causal research)

Causal Research

Causality can be thought as a statement: "If X, then Y"

Independent Variables are those variables over which researchers has control and wishes to manipulate. Example: **4P's - price, product, place, promotion**.

Dependent Variables are the ones over which we have little or no control, but a strong intent in changing. Example: **sales, market share, customer satisfaction, salesforce turnover, net profits**.

Extraneous Variables are the ones that might have impact on dependent variables, but are not independent variables.



Causal Research - Experiment

Experiment is manipulating an independent variable to see how it affects the dependent variable, while controlling the effects of additional extraneous variables.

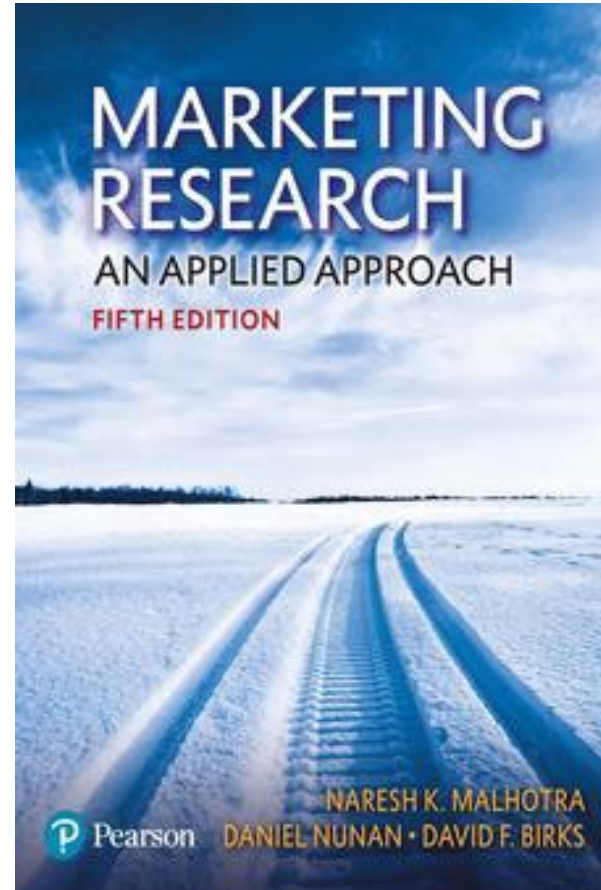
Experimental design is a procedure for devising an experimental setting so that a change in a dependent variable may be attributed solely to the change in an independent variable. They control the influence of any extraneous variable.

"True" experimental design isolates the effects of the independent variable on the dependent variable while **controlling the effects on extraneous variables**.

Quasi-experimental design does not control the effects of extraneous variables. Control of extraneous variables is achieved by a **control group**, which is a group that has not been exposed to a change in independent variable, while **experimental group** has.

Book Recommendation

Book:
Marketing Research
Malhotra et. al, 2017



Purpose of Research

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<i>Issue</i>	<i>Purpose</i>	<i>Research question</i>
Market	Composition of customer market segment	Who is in our customer market segment?
Competitor	Consumers' perception of competition	What else do they buy and why?
Consumer	Motivation for purchase	What is the motivation for buying our product?
Product	Improvement of product	Does our product provide the desired benefits?
Promotional	Effectiveness of different messages and media	What and where do our customers hear about us?
Distribution	Ease of purchase	Is our product available at the right locations?
Pricing	Choosing pricing levels	What do our customers think of our price?

Quote



Research Brief Template

Market research brief template

Background	
Research purpose	
Objectives	
Research methods	
Constraints	
Deliverables	
Action standards	
Budget and timelines	
Stakeholders	

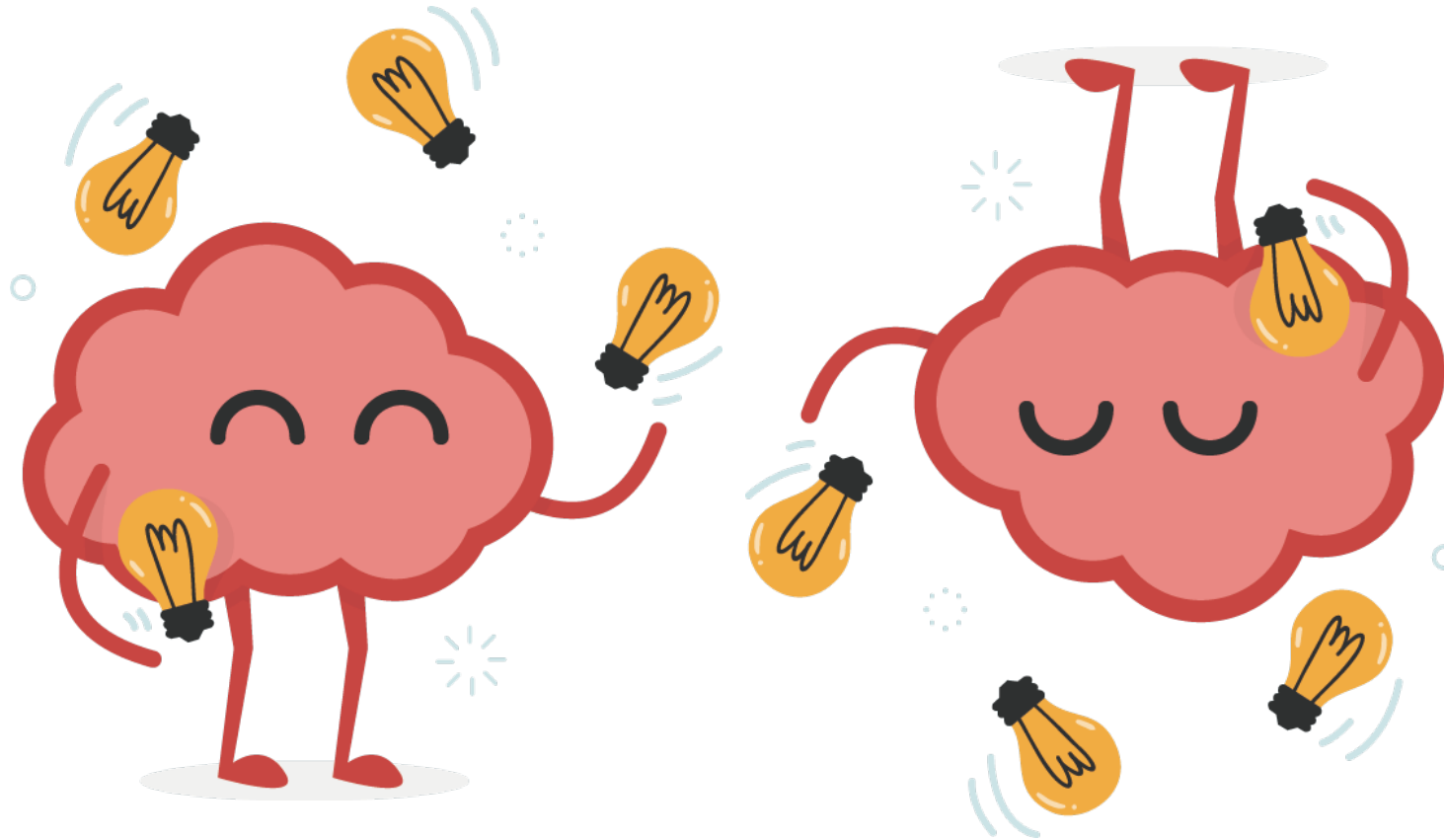
Research Brief Guide

Background	<i>Give any context that helps the researchers understand the challenge better. Try to be concise and relevant. What caused the need for research to take place? What markets are included? What do you already know about the market?</i>
Research purpose	<i>What is the #1 priority question that you need the market research to answer? You will likely have MANY questions, but identifying the key single question helps the research team prioritise. Consider whether this question is closed (should we launch Product x - Yes or No?) or more open (what's the best advertising message to drive sales of Product X?)</i>
Objectives	<i>Business objective : What is your end goal and how will it be achieved? e.g. how to grow sales by attracting new consumers. Market research objective : Summarise the research aims, information needs and list questions you need the research to answer. What decisions will you make with the research? This can go into more specific detail than the overall research purpose.</i>
Research methods	<i>Is your market research objective to understand an opportunity or challenge (which leans to qualitative) research methods or to measure and validate a hypothesis (which leans to quantitative research methods), Or both? If you have any expectations on the sample size, survey length and have any stimulus material already prepared, you should refer to these in this section. If you don't have these things, make clear your expectations of the researchers to respond.</i>
Constraints	<i>Are there any mandatory considerations or things to avoid? e.g. If there are any legal or regulatory requirements in the industry, if a particular group should or should not be included. Are there any geographic considerations the researchers should include?</i>
Deliverables	<i>What specifically must the project deliver and how will you define it as a success? Is there a specific reporting format you want?</i>
Action standards	<i>For any decisions that will be made on the basis of the research, list out the measures that will be used to evaluate the decision e.g. we will only launch Product X if (80%) of respondents say they will purchase.</i>
Budget and timelines	<i>Budgets will need to cover the market researchers time, any costs incurred with conducting interviews (e.g. hiring a venue) and production of any stimulus materials. It is not unreasonable to ask for details of costs. Also, be reasonable on timelines, it takes time to organise questionnaires, invite interviews and compile reports so build this in to your timeline.</i>
Stakeholders	<i>Who will see the report and who will make decisions on it?</i>

Research Brief Example

Background	Three-brains ice cream shop want to test the market size potential of adding a vegan ice cream to its range of products. The opportunity was spotted based on an increasing trend seen in Keyword Search* and Social channels towards vegan friendly products.
Research purpose	What is the sales opportunity (total number of customers) over the next 12 months if we add vegan ice cream to our range?
Objectives	Business objective : Drive \$500k in additional profit from new product launch by attracting new vegan consumers to our range Market research objective : How many vegans can we target in the Sydney area? How many would be likely to purchase an ice cream from our shop? What would make them interested in such a product and more likely to buy and keep buying? (trial and repeat rates)
Research methods	We expect some qualitative research (focus groups) to understand key drivers and barriers that would make vegans choose our ice cream. We then require some quantitative validation to support our business case in terms of the total target audience and potential customers. We can provide product samples, packaging images and descriptions of the production process as stimulus materials.
Constraints	We only sell in the Sydney area. and do not sell elsewhere. Our product is aimed at adults and we do not promote to under 18s.
Deliverables	We expect a short presentation which shows key drivers and barriers to vegans purchasing our ice cream; a recommendation on the route which drives the most sales; a forecast of sales (total number of customers, trial and repeat rates) for the first 12 months.
Action standards	In order to hit the target of \$500k profit, we need to sell 100,000 units (\$5 profit / ice cream). Based on our other ice cream launches, the product needs to be trialled by at least 30% of the potential audience and have a repeat rate (more than 3 purchases in 6 months) of at least 10%.
Budget and timelines	Our total budget for this project is \$50k, and we expect a research plan / response within 2 weeks and the final debrief in 6 weeks.
Stakeholders	Managing director, marketing director and the brand manager will be in the debrief. The marketing director is accountable for the overall go / no-go decision.

Research Brief



Research Brief Template

Market research brief template

Background	
Research purpose	
Objectives	
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Action standards	
Budget and timelines	
Stakeholders	

What Will Be Your Deliverables?

#1: Prepare a Word document of your **market research brief**.

Quantitative Research



John Sculley (1939) - President of PepsiCo (1977–1983), CEO of Apple Inc.

In 1987, Sculley was named Silicon Valley's top-paid executive, with an annual salary of US\$10.2M.

Hint

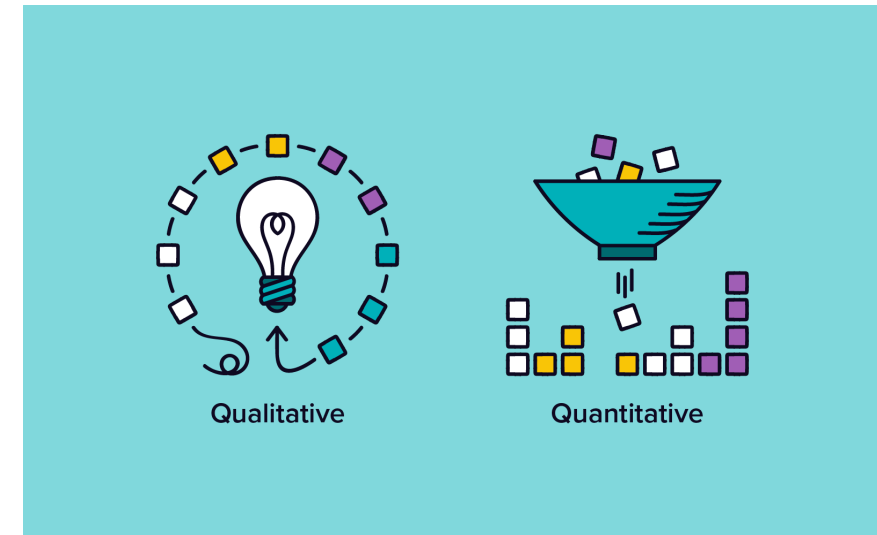
Accurate decision making: A mix of quantitative research strongly backed by qualitative research is paramount for decision-making.

Compare Quantitative & Qualitative Research

What are the basic differences between quantitative and qualitative research methods?

Quantitative and qualitative research methods differ primarily in:

- Their **analytical objectives**
- The **types of questions** they pose
- The **types of data collection instruments** they use
- The **forms of data** they produce
- The **degree of flexibility** built into study design



Qualitative Research

Qualitative methods are **typically more flexible** – that is, they allow **greater spontaneity and adaptation** of the interaction between the researcher (you) and the study participant.

For example, qualitative methods ask mostly “**open-ended**” questions that are not necessarily worded in exactly the same way with each participant. The order of questions in interviews **(IDI) is not always the same** with various respondents on the same topic. You can use a semi-structured approach. **Follow the flow and respondent’s comfort.**

Prepare follow-up questions. Seek clarification. You can have a **pilot interview** to **touch the pulse of respondents.**

With open-ended questions, **participants are free to respond in their own words**, and these responses tend to be more complex than simply “yes” or “no.”

Qualitative Research

PRO of qualitative methods

- meaningful and culturally salient to the participant
- unanticipated by the researcher
- rich and explanatory in nature



Ethnographic Research

Ethnographic research is the most **in-depth observational method** that studies people in their **naturally occurring environment**.

This method requires the researchers to **adapt to the target audiences' environments** which could be anywhere from an organization to a city or any remote location. Here geographical constraints can be an issue while collecting data.

This research design aims to understand the cultures, challenges, motivations, and settings that occur. Instead of relying on interviews and discussions, you experience the natural settings first-hand.

This type of research method can last from a few days to a few years, as it involves in-depth observation and collecting data on those grounds. It's a challenging and a time-consuming method and solely depends on the expertise of the researcher to be able to analyze, observe and infer the data.

It is a flexible method. You/researcher will not ask the same questions in the identical order. But still you will have your set of primary and follow-up questions set in your **interview guide**.

Quantitative Research

Generally, **quantitative methods are fairly inflexible**. With quantitative methods such as surveys and questionnaires, for example, you/researchers will ask all participants identical questions in the same order.

The response categories from which participants may choose are “closed-ended” or fixed.

The advantage of this inflexibility is that it allows for **meaningful comparison of responses across participants and study sites**.

However, it requires a **thorough understanding of the important questions to ask, the best way to ask them, and the range of possible responses**.

What is meant by survey and questionnaire? Is there a difference?

Surveys and Questionnaires

Surveys and questionnaires are both research tools used to collect data from participants, but **they differ in their format, administration, and the depth of information they gather**. Here are the main differences between surveys and questionnaires:

Format

- **Surveys:** **A survey is a broader term** that refers to a **research method used to gather information from a group of people**. Surveys can use **various data collection methods**, such as face-to-face interviews, telephone interviews, online surveys, or mailed questionnaires.
- **Questionnaires:** A questionnaire is a **specific type of survey that involves a set of standardized questions** designed to gather data from respondents. Questionnaires are typically structured and can be administered in written or electronic formats.

Surveys and Questionnaires

Administration

- **Surveys:** Surveys can be administered through different methods, including **face-to-face interviews, telephone interviews, online surveys, or mail surveys**. The administration method depends on the research goals, target population, and available resources.
- **Questionnaires:** Questionnaires are primarily administered **in a written or electronic format. They are self-administered by the respondents**, who read and respond to the questions without direct interaction with the researcher.

Interaction with participants

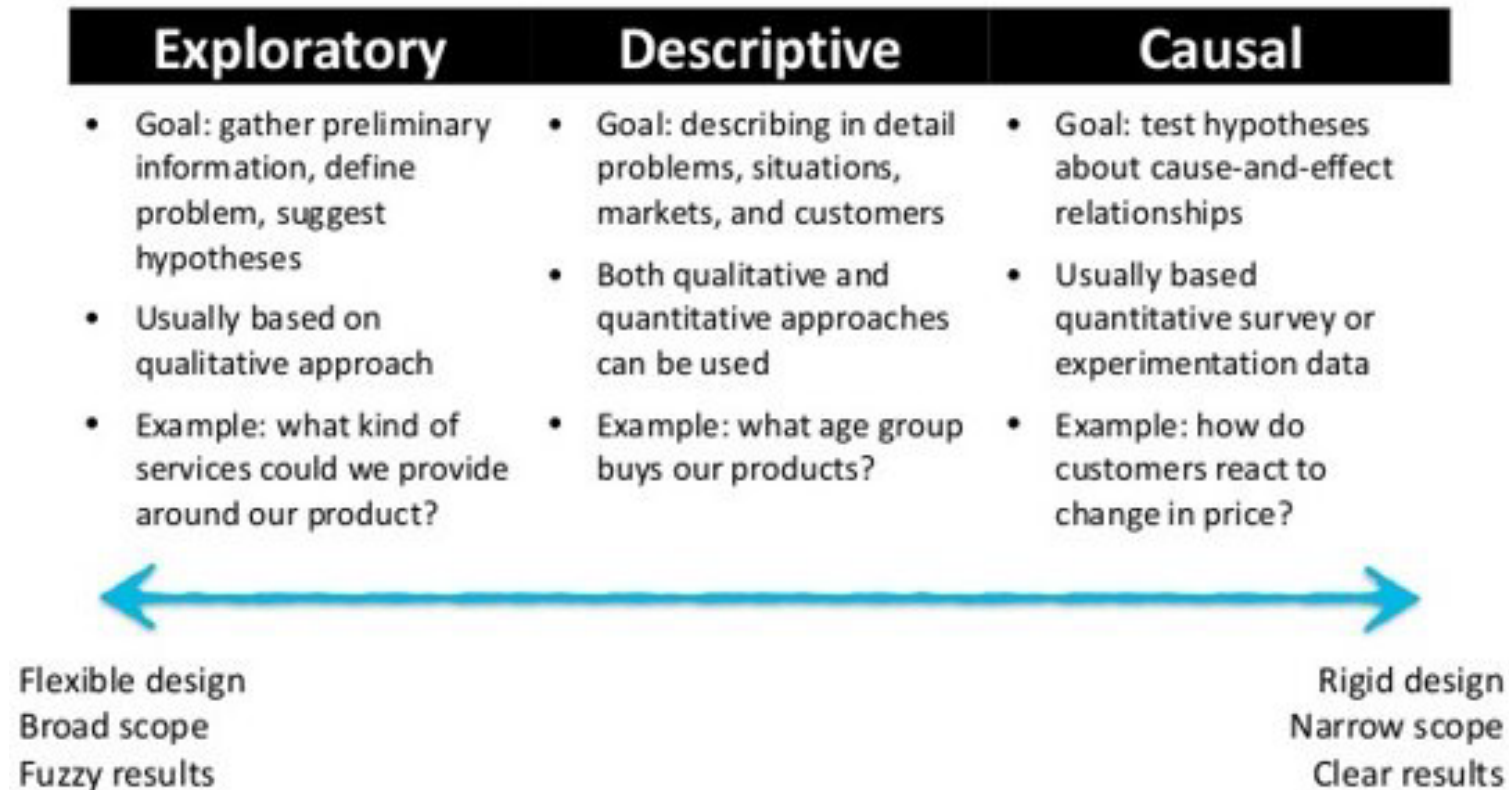
- **Surveys:** Surveys can involve both **direct and indirect interaction with participants**, depending on the administration method. Face-to-face or telephone surveys allow for real-time interaction between the interviewer and the respondent.
- **Questionnaires:** **Questionnaires do not involve direct interaction** between the researcher and the participants. They are designed to be self-explanatory so that respondents can complete them without assistance.

Surveys and Questionnaires

Flexibility and depth of data:

- **Surveys:** Surveys can collect both **quantitative and qualitative** data, depending on the types of questions used. They may include **closed-ended questions (multiple-choice, Likert scales)** that provide structured and numerical data, as well as **open-ended questions that allow for more in-depth responses**.
- **Questionnaires:** Questionnaires are more structured and typically focus on **closed-ended questions**. They are particularly suited for gathering standardized data and are less effective in capturing nuanced or detailed information.

Determine Research Design

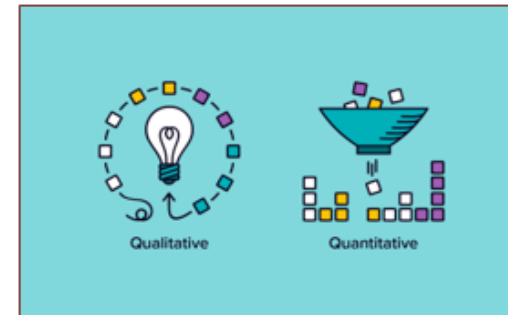


Descriptive Research

The main characteristics, as the name suggests, is to describe a particular marketing phenomenon that is of interest for your project. **How consumers behave, think, feel?**

When we wish to know:

- **Who** are our customers/clients?
- **What** brands of products/services they buy/use?
- **What** quantities and qualities they buy/need/prefer?
- **Where** they buy/use the brands/products/services?
- **When** they shop/use applications/need services?
- **How** they found about our products/services?
- **Which** other products/services they buy/use?



Descriptive research is desirable when we wish to project research finding to a larger population (if the sample is **representative**).

Descriptive Research - Survey

- The **most common** marketing research studies
- They have a **single data collection point**
- Sample population is measured only in one point in time
- One single **snap-shot** (photograph) of the **population**
- Normally employs a **large sample size**

Sample Survey (Questionnaire) is a cross sectional research whos sample is drawn in such a way to be representative of a specific population.



Quantitative Research

Conduct quantitative market research

Quantitative research implies collecting first-hand information directly from a target audience in an organized manner using research tools like surveys, questionnaires, and polls.

Reasons for you to conduct quantitative market research

- **Generalize results:** Use the quantitative data to make generalizations of the general population based on the results of the sample respondents.
- **Draw conclusions:** Use quantitative research methods to draw conclusions about different areas of the business and take data-backed decisions.

Quantitative Research

- **Gauge customer perception:** Quantitative research is a great tool to use before launching products into the market to understand the potential customer's perception. (You can grasp customer perception of the competition)
- **Product feedback:** Ask feedback from your current customers or customers of your competition to know the areas you're or they're lacking. You can thus take measures to improve the product or service.
- **Market plan:** You need a lot data to make a market plan before entering the market. Quantitative market research provides you with the data necessary to build a market plan.

Questionnaires Vs. Polls

Questionnaires and polls are both methods used to collect data from individuals, but they differ in their purpose, structure, and administration. Here are the main differences between questionnaires and polls:

Purpose:

- **Questionnaires:** Questionnaires are research instruments designed to gather data from participants for the purpose of conducting research, surveys, or assessments. They are often used in **academic studies, market research, and social science investigations to collect in-depth and detailed information on various topics.**
- **Polls:** Polls, on the other hand, are used primarily to **quickly measure public opinion**, preferences, or attitudes on a specific question or issue. They are commonly used in **media, politics, and social media platforms** to gauge the opinions of a larger population.

Questionnaires Vs. Polls

Scope:

- **Questionnaires:** Questionnaires tend to **cover a broader range of questions and topics**. They may include **multiple questions that explore different aspects of a subject**, allowing for a more comprehensive understanding of the participants' perspectives and experiences.
- **Polls:** Polls are usually more focused and **centered around a single question or a limited set of questions**. They aim to capture a **quick snapshot of public sentiment** on a specific topic without delving deeply into the reasons behind the responses.

Questionnaires Vs. Polls

Sample Size:

- **Questionnaires:** Questionnaires can be used with both **small and large sample sizes**, depending on the **research objectives and available resources**.
- **Polls:** Polls typically aim to reach a **larger population or sample size** to capture a representative snapshot of public opinion.

Descriptive Research – Pros and Cons



➤ **Pros:** It is fast to do, to set up & collect data.

It provides making specific predictions.

It provides statistical data.

It allows managers to have an overview of a pattern of consumers perceptions.

➤ **Cons:** Negative side is even though we have a general overview, we do not know the details.

For example **WHY** the satisfaction with service is lower or higher. (exploratory research)

We do not have cause and effect relationships. (causal research)

Survey – Objectives and Elements

Questionnaire has three specific objectives:

1. **Translate the information needed into a set of specific questions** that participants can and will answer.
2. **Motivate the participant** to cooperate and complete the task.
3. **Minimize response error.**

Survey – Objectives and Elements

Questionnaire is only one element of data-collection package, there are also:

1. **Instructions** on how to select, approach and question participants (**fieldwork procedures**)
2. **Rewards** for participants (gift, voucher – empathy with the participant)
3. **Communication aids** (images, maps, products, videos)

Fieldwork

Fieldwork interviewers should be selected to match respondents' characteristics. (You have to match them too!)

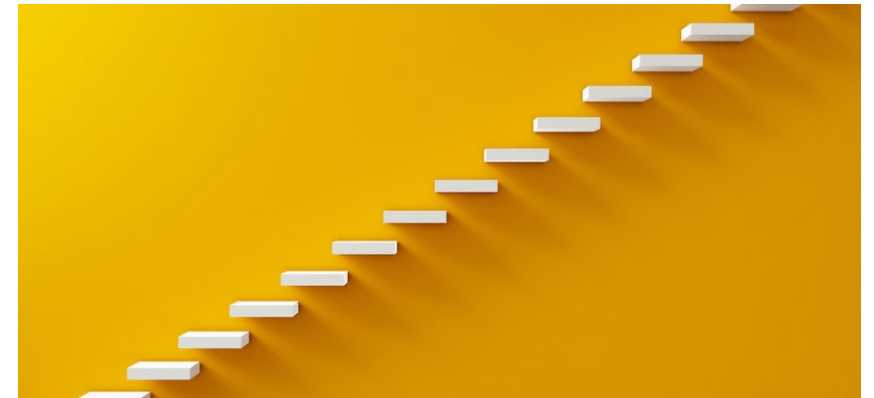
The job requirements will also vary with the nature of the problem and the type of data collection method, but there are some general qualifications of survey fieldworkers:

- **Strong** - Fieldwork can be **strenuous, stamina is required** to do the job (a lot of No's as people are suspicious).
- **Outgoing** – You/Interviewers should be able to **establish rapport with respondents**. You/they should be able to relate quickly to strangers.
- **Communicative** – You/they must have effective **speaking, observation and listening** skills.
- **"Pleasant"** appearance - If a fieldworker's physical appearance is unusual (**from the respondents' perspective**), the data collected may be biased.
- **Educated** - Interviewers must have adequate language, communication and computer literacy skills.
- **Experienced** - Experienced interviewers are likely to do a better job in following instructions, obtaining respondent cooperation and conducting the interview.

Think about the possible language barrier when interviewing. Will your respondents speak fluent English/Spanish/Catalan? Do you need a local fieldworker?

Survey Design – Steps to Follow

There are various steps to design a questionnaire / survey

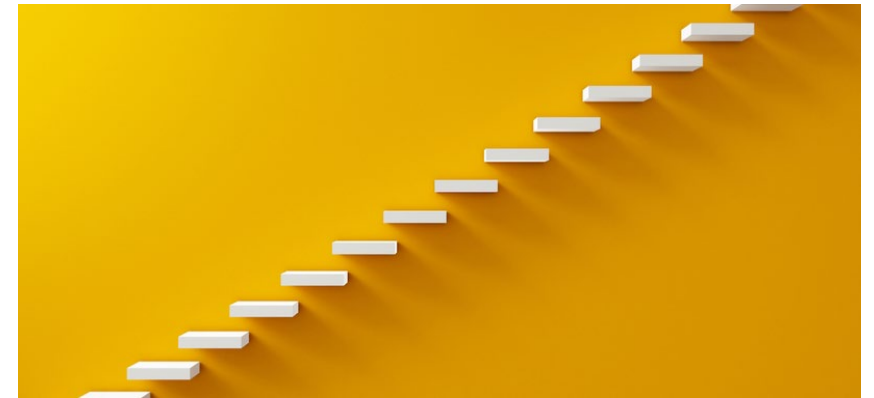


Do not start with preparing surveys in a survey software before having them prepared and checked in Word.

Survey Design – Steps to Follow

You should follow these **steps to design a questionnaire / survey**:

1. Specify the information needed
2. Specify the type of interviewing method
3. Determine the content of individual questions
4. Overcome respondents' inability or unwillingness to answer
5. Choose question structure (open ended, close-ended)
6. Choose question wording
7. Arrange the questions in proper order
8. Design form and layout
9. Publish the questionnaire
10. Pilot test to eliminate problems



Writing Questions Down

How to start?

- Do not start your surveys with personal questions (Name, Age, Address, etc.)
- It can only scare your participants
- Maybe this data is not needed at all?
- Remember to ask only the questions that are **NEED to KNOW** and not **NICE to KNOW**

Qualifying Market Research Questions

Start with **Qualifying Market Research Questions**, also known as **screening questions** or **eligibility questions**, that are used in market research to **identify a potential respondent that can proceed with the research interview or survey**. Those who don't meet the criteria specified by Qualifying Market Research Questions are terminated from the survey and their responses are not taken for analysis.

It would be uncommon for a survey to open to anyone to respond, as you should have a particular market or segment you want to study. Therefore, using Qualifying Market Research Questions helps to determine the right people are taking part and the results of the findings are actually meaningful.

Qualifying Market Research Questions are positioned at the beginning of a survey to allow only those eligible for the survey or interview to take place.



Qualifying Market Research Questions

Have you purchased any agricultural products, tools, equipment, or technology in the last 12 months? Have you purchased any agritech product or service for more than 50 euros?

Which type of agriculture or food-production activity are you involved in?

Crop farming

Livestock farming

Horticulture or gardening

Aquaculture

Food processing

Agricultural research or education

None of these

Who is primarily responsible for purchasing agricultural supplies, equipment, or technology in your organization or household?

Me

My partner

My parents

My employer or manager

Another family member

My business partner

We decide collectively

Other

How many times have you purchased agricultural supplies, equipment, or agritech products or services in the last 7 days?

Do you purchase agritech products or services online? Have you purchased any agritech product or service online in the last 2 months?

Watch Out for Open-Ended Questions

The following questions are good for IDI, Ethnographical research, focus group, but NOT for surveys.

OPEN-ENDED, CONVERSATIONAL QUESTIONS

Stop Asking Yes / No Questions!

How does this / that compare to what you're ideally looking for?
How does this / that compare to your ideal situation?

Tell me about...

What do you mean...

How so...

Why is that...

What does that mean to you...

How would you...

Elaborate...

Give me some examples...

I don't understand...

What other things...

What else...

What additional items...

What are some other reasons...

In what other ways...

Source: Barry Rhein, *Selling Through Curiosity*



Open-Ended Questions for Surveys

Open-Ended Questions

1. How old are you? _____
2. How do you feel when you drive your Toyota minivan?
Why do you feel that way?
3. Can you name three sponsors of the Monday night football games? _____
4. Do you intend to purchase an automobile this year? _____
5. Why did you purchase a Sony brand color television set?

6. Do you own a VCR? _____

Which one of these questions should NOT be open-ended questions in a survey?

Why?

Watch Out for Open-Ended Questions

Analyzing open-ended responses ranks as a top challenge!

It also brings great rewards as they uncover customer insights, but...

You must make a good balance between open and closed questions!

Example Open-Ended Question Responses

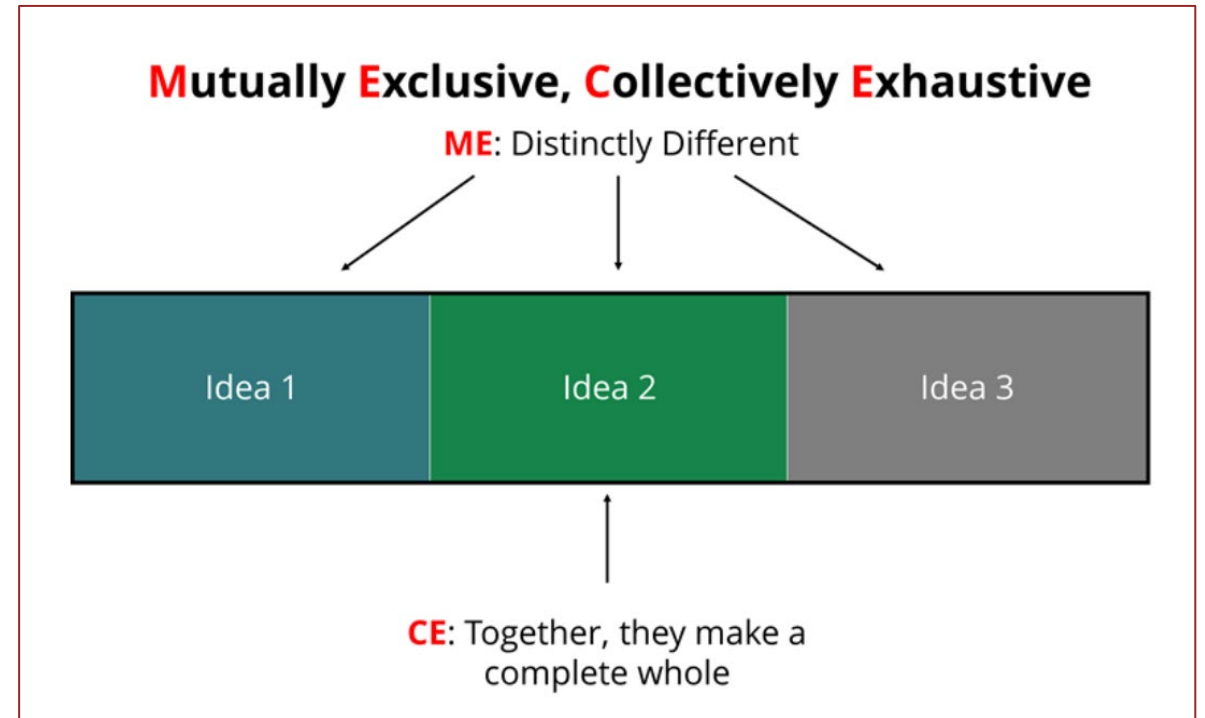
Let's imagine your open-ended question on ecological food items that respondents buy gave you the following 9 answers (only) and you have to summarize them. You must present them in a report. You can't just list them, of course!!! What will you have to do?

GROCERY LIST

- | | |
|--------------------------------------|-------------------------------------|
| ☐ Banana | ☐ Grapes |
| ☐ Bread | ☐ Bagel |
| ☐ Muffin | ☐ Popsicles |
| ☐ Ice cream | ☐ Strawberry |
| ☐ Fish Sticks | |

Group Items

- **Bakery Items:** Bread, Muffin, Bagel
- **Frozen Food:** Popsicles, Ice Cream, Fish Sticks
- **Fresh Fruit:** Strawberry, Banana, Grapes



Group Items



What is **MECE** ("mee-see") and what is the difference?
MECE is made up of two parts.

First, “mutually exclusive” is a concept from **probability theory** that says **two events cannot occur at the same time**.

If you roll a six-sided dice, the outcomes of a six or a three are **mutually exclusive**. When applied to information, mutually exclusive ideas would be distinctly separate and not overlapping.

Second, “collectively exhaustive” means that the set of ideas is inclusive of all possible options. In the six-sided dice example, the set {1,2,3,4,5,6} is **mutually exclusive AND collectively exhaustive**.

Open-ended Question Coding

What worries you about climate change?

- Flooding
- Beeing too hot
- Heatwaves
- Storms
- Heavy rainfall
- Heat
- Bad winters
- Food costs more
- Heat stress
- Drought
- Lack of water
- Restrictions on driving
- Bad harvests and rising prices
- Lots of precipitation
- Very high fuel costs
- Paying heating bills
- Too hot to go out in summer
- Restrictions on flights
- Hurricanes
- Very cold winters
- Food shortages
- Higher fares
- Babies dying
- Very hot summers
- Old people suffer
- Bad weather at sea

Open-ended Question Coding



Coded answers

Flooding,	restrictions on driving,	Hurricanes,
Being too hot,	Bad harvests and rising prices,	very cold winters,
Heatwaves,	lots of precipitation,	food shortages,
Storms,	very high fuel costs,	higher fares,
heavy rainfall,	paying heating bills,	babies dying,
Heat,	too hot to go out in summer,	very hot summers,
bad winters,	restrictions on flights,	old people suffer,
food costs more,		bad weather at sea,
heat stress,		
lack of water,		
Drought,		

1. Weather/climate changes 2. Economic change 3. Health risks

How to do this categorization?



5-step Bucketing Technique

5-step Bucketing Technique



1. **Read every single response.** Here you get a real feel for the data. You will notice trends and have the opportunity to highlight quotes that can add spectacular insights.
2. **Create your buckets.** Buckets are simply different categories into which you will place the various responses. Each bucket represents a trend you've identified, and some responses may contain multiple ideas that belong in multiple buckets.
3. **Examine and organize your buckets.** Once you've placed each response in its appropriate bucket or buckets, review your buckets to see if any can be combined or need to be split. This gives you the chance to identify clear issues, trends and new ideas provided by participants.

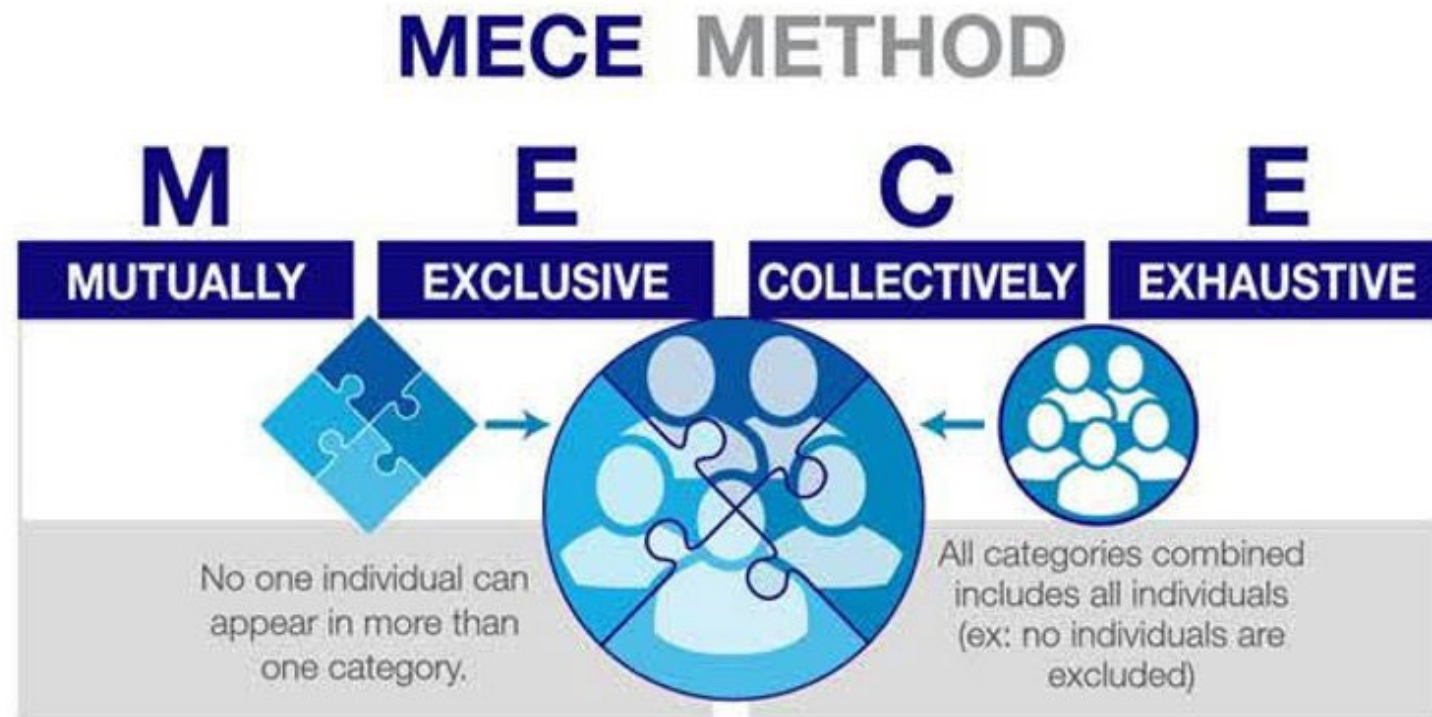
Bucketing Technique



4. Pinpoint the meaning and the context of collected responses. Combine your open-ended responses with relevant close-ended responses to generate actionable data. Perhaps you ran across an “other” answer that outshines the offered responses in a single-select question. Or maybe you uncovered fresh information on why customers opt for (or do not opt for) certain product or service.

5. Sum it all up. Your final step is to create a summary of the major trends you’ve identified throughout your open-ended question analysis. Back up trends with key quotes you’ve highlighted and any relevant comments from survey participants. Those highlighted quotes can likewise come in handy for grabbing attention when presenting your findings.

Bucketing Technique



Instead Use Other Type of Questions

1. **Takes too much time** to answer out-of-the-box
2. Easier to **analyze the responses**

You may be tempted to reach for any number of tools that promise to help with analysis of open-ended data, but they are unlikely to give you the same depth and accuracy as you get by manually analyzing the results.

Dichotomous Questions

Dichotomous Questions

A fixed-alternative question in which respondents are asked to indicate which of the two alternative responses most closely corresponds to their position on the subject.

Example

Do you think laws requiring passengers in motor vehicles to wear seat belts are needed?

- ☐ Yes
- ☐ No

Multichotomous Questions

Multichotomous Questions

A fixed-alternative question in which respondents are asked to choose the alternative that most closely corresponds to their position on the subject.

Example

How old are you?
☐ Less than 20
☐ 20-29
☐ 30-39
☐ 40-49
☐ 50-59
☐ 60 or over

Watch out for Open Questions Part 2

Opening your survey with open-ended questions may be a great way to **scare away participants** and make them **leave your survey!**

Open questions should instead be strategically placed throughout your questionnaire.

You can use them to give participants an “other” response option if none of the pre-selected responses of a multiple choice questions apply, providing a text box for their answer.

You can also pair open questions with multiple choice closed questions to gather more information on **why** a participant responded the way they did.

For instance, you can first ask about their level of customer service satisfaction, giving them multiple choices that range from “Excellent” to “Poor.” The next question can be an open-ended one that asks why they rated their satisfaction at that particular level.

Pay Attention to Sequencing

Guidelines for Question Sequencing

- Use simple, interesting opening questions
- Use the funnel approach, asking broad questions first
- Carefully design branching questions
- Ask for classification information last
- Place difficult or sensitive questions near the end

Watch Out for the Wording

Guidelines for Question Wording

- Use simple words and questions
- Avoid ambiguous words and questions
- Avoid leading questions
- Avoid implicit alternatives
- Avoid implicit assumptions
- Avoid generalizations and estimates
- Avoid double-barreled questions

What are Leading Questions?

How can you avoid them?

Leading questions are questions that are worded in such a way as to influence participants' responses – in other words, questions that lead participants along a particular line of thinking.

Asking leading questions risks conveying your own value judgments and biases and imposing a perspective on participants. When asked a leading question, participants are likely to provide a response that accords with it simply because they are reluctant to contradict the interviewer.

To avoid this, ask neutral questions free of preconceptions. We will see now some examples of leading and unbiased questions.

Watch Out for Leading Questions!

Leading Questions

A question framed so as to give the respondent a clue as to how he or she should answer.

Example

Do you feel that limiting taxes by law is an effective way to stop the government from picking your pocket every payday?

- ☐ Yes
- ☐ No
- ☐ Undecided

What is your position on limiting taxes by law?

- Disagree
- Neutral
- Agree

How to set Non-Leading Questions in a Qualitative Survey?

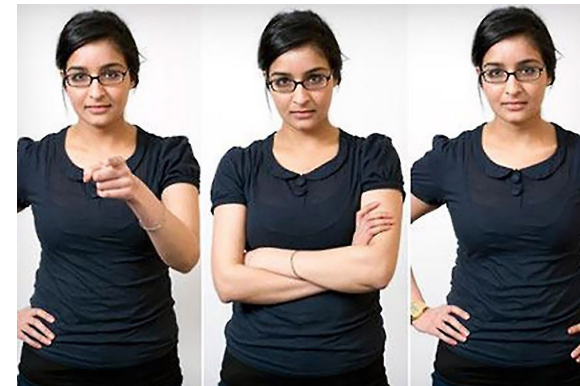
Direct questions:

- “What do you mean when you say . . .?”
- “Why do you think . . .?”
- “How did this happen?”
- “How did you feel about . . .?”
- “What happened then?”
- “Can you tell me more?”
- “Can you please elaborate?”
- “I’m not sure I understand X. . . . Would you explain that to me?”
- “How did you handle X?”
- “How did X affect you?”
- “Can you give me an example of X?”

Sometimes we are not aware of leading...

Tone refers to the volume and sound quality of a person's voice. It can reveal biases such as excitement, approval and disapproval, scorn, surprise, and disbelief. Remember that cultural context affects how tone of voice will be interpreted – what is moderate in one context may seem inappropriately loud in another.

Body language is the culturally specific interpretation of what it means to move or position the body in a particular way. Facial expressions are perhaps the most obvious example, but gestures, posture, and constant movement can also be powerful indicators of a person's mood, opinion, and evaluative stance. Interviewers should be conscious of their body language at all times



Sometimes we are not aware of leading...

Indirect probes:

- Neutral verbal expressions such as “uh huh,” “interesting,” and “I see”
- Verbal expressions of empathy, such as, “I can see why you say that was difficult for you”
- Mirroring technique, or repeating what the participant said, such as, “So you were 19 when you had your first job . . .”
- Culturally appropriate body language or gestures, such as nodding in acknowledgment

Watch Out for Implicit Alternative!

Implicit Alternative

A problem that occurs when an important alternative or response option is not included in a question (or response categories).

Example

Would you like to have a job, if this were possible?

☐ Yes ☐ No

Would you prefer to have a job, or do you prefer to do just your housework?

☐ Yes ☐ No

Watch Out for Implicit Assumption!

Implicit Assumption

A problem that occurs when a question is not framed so as to explicitly state the consequences, and thus it elicits different responses from individuals who assume different consequences.

Example

Would you like to double the number of job offers you receive as a senior?

☐ Yes ☐ No

Would you like to double the number of job offers you receive as a senior if that means devoting an additional 10 hours per week to studying so as to raise your grade point?

☐ Yes ☐ No

Watch Out for Double Barrel!

Double-Barreled Question

A question that calls for two responses and thereby creates confusion for the respondent.

Example

Are the food and service at the local Pizza Hut good?

☐ Yes ☐ No

Key: Be on the lookout for “and” and “or” in your items!

Pretesting is Compulsory

Pretest

Use of a questionnaire (or observation form) on a trial basis in a small pilot study to determine how well the questionnaire (or observation form) works.

ALWAYS PRETEST DATA COLLECTION FORMS!!!!

"Soften" the Context

Use of Counterbiasing Statement

Recent studies have shown that a high percentage of males use their wives' cosmetics to hide blemishes. Have you used your wife's cosmetics in the past week?

Visual Appeal is Important!

Don't forget that survey
already forms part of your brand!

Add Visuals, brand colors, videos, etc.

Physical Characteristics of Questionnaire: Suggestions

- questionnaire should appear simple to complete (white space is your friend!)
- minimize number of pages (smaller fonts are OK, provided form appears simple)
- mix-up response formats occasionally (avoids response set bias and breaks monotony)
- use directions as necessary for each group of items, but keep them short and simple
- number items within each section
- have respondents check boxes rather than lines
- use shading, boxes, lines, etc., to keep it interesting

Survey Question Wording

Careful with wording!!!

- Define the issue. *Which e-commerce apps do you use? 'who', 'what', 'when' and 'where'*
- Use ordinary words. *Match the vocabulary level of the target participants.*
- Use unambiguous words. *'usually', 'normally', 'frequently', 'often', 'regularly', 'occasionally'*
- Avoid leading or biasing questions. *A leading question clues to the desired answer.*
- Avoid implicit alternatives. *Do you like buying online or would you rather shop in a brick-and-mortar shop?*
- Avoid implicit assumptions. *Consequences of the statement – Would you still buy online if the delivery cost more than 6 euros?*
- Avoid generalizations and estimates. *The annual per capita cost on ecologic food in your household?*
- Use positive and negative statements. *Use dual statements, some positive & some negative.*

Useful Split Ballot Technique

Split Ballot

A technique used to combat response bias in which one phrasing is used for a question in one-half of the questionnaires while an alternate phrasing is used in the other one-half of the questionnaires.

Example

Do you think gasoline will be more expensive or less expensive next year than it is now?

- ☐ More expensive
- ☐ Less expensive

Do you think gasoline will be less expensive or more expensive next year than it is now?

- ☐ More expensive
- ☐ Less expensive

Arrange the Questions in Proper Order



Hints and tricks:

- The opening questions should be interesting, simple and non-threatening.
- Qualifying questions (eligibility) should serve as the opening questions.
- Basic information should be obtained first, followed by classification and finally identification information.
- Difficult, sensitive or complex questions should be placed late in the sequence.
- General questions should precede specific questions.
- Questions should be asked in a logical order.
- Branching questions should be designed carefully to cover all possible contingencies.
- The question being branched should be placed as close as possible to the question causing the branching, and the branching questions should be ordered so that the participants cannot anticipate what additional information will be required.

Fieldworker Errors

Leading respondents

- Wording (example: Do you/Don't you, Is it/Isn't it)
- Voice inflection (phone interviews)
- Body language (nods for yes/no while questioning plants a seed in the mind)
- Subtle leading (phone interviews "unhuh"/"okay")

Control - Orientation sessions and role-playing



Unintentional Fieldworker Errors

Unintentional fieldwork errors occur when interviewers commits errors while believing to perform correctly.

Reasons:

- Gender (sensitive topics)
- Tone of voice (monotonous voice demotivates participants)
- Lack of experience
- A mere presence of the interviewer
- Fatigue (slip-ups, wrong note-taking, skip pattern, forget details)



Intentional Fieldworker Errors

Interviewer cheating

- Compensation system is often the reason for these errors
- Interviewers are normally paid by completed interviews, not by hours
- Interviewing respondents that are not in the sampling plan
- Long hours and frustrating work might make an entrance to cheating
- Big temptation to hand in **bogus** completed interviews

Control – Supervision and **validation** (call back 10% respondents to assure they were interviewed)



Intentional Fieldworker Errors

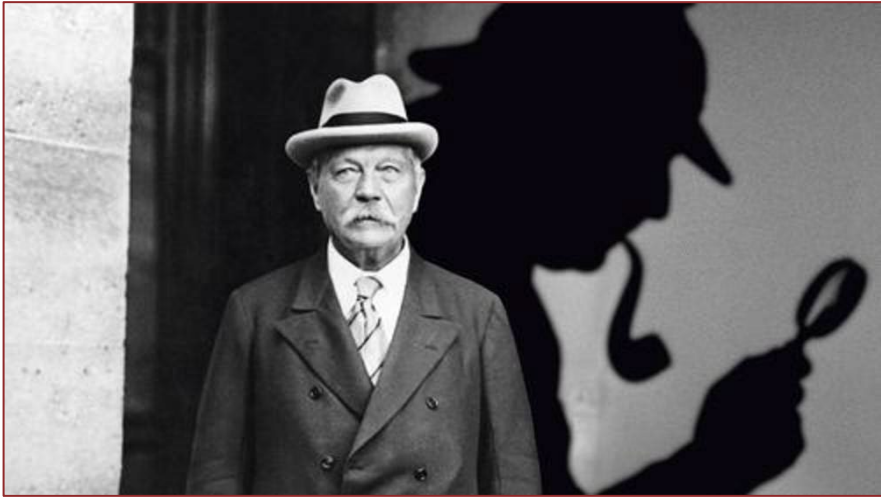
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Control – Supervision and **validation** (call back 10% respondents to assure they were interviewed)



Sampling



**It is a capital mistake
to theorize
before one has data.**

Quote of the Day

Sir Arthur Ignatius Conan Doyle
(1859 – 1930), Scottish physician and writer,
most noted for his stories about Sherlock Holmes)

Sampling

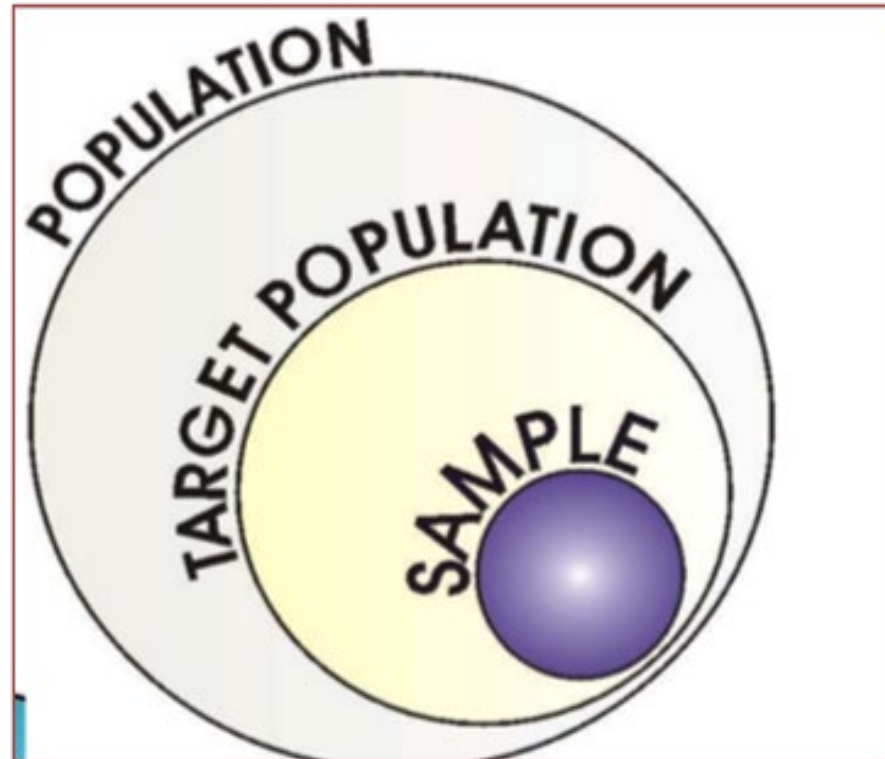
Most common objective of marketing research is to **obtain information about** the characteristics of a **population**.

Population - The **aggregate of all the elements**, sharing some common set of characteristics, that comprise the universe for the purpose of the marketing research problem.

Census - A complete enumeration of the elements of a population or study objects.



Sampling



Sampling

There are two big groups of sampling methods:

1. Non-probability sampling - does not use chance selection procedures but rely on the **personal judgement of the researcher**, who arbitrarily or consciously decides which elements to include in the sample.

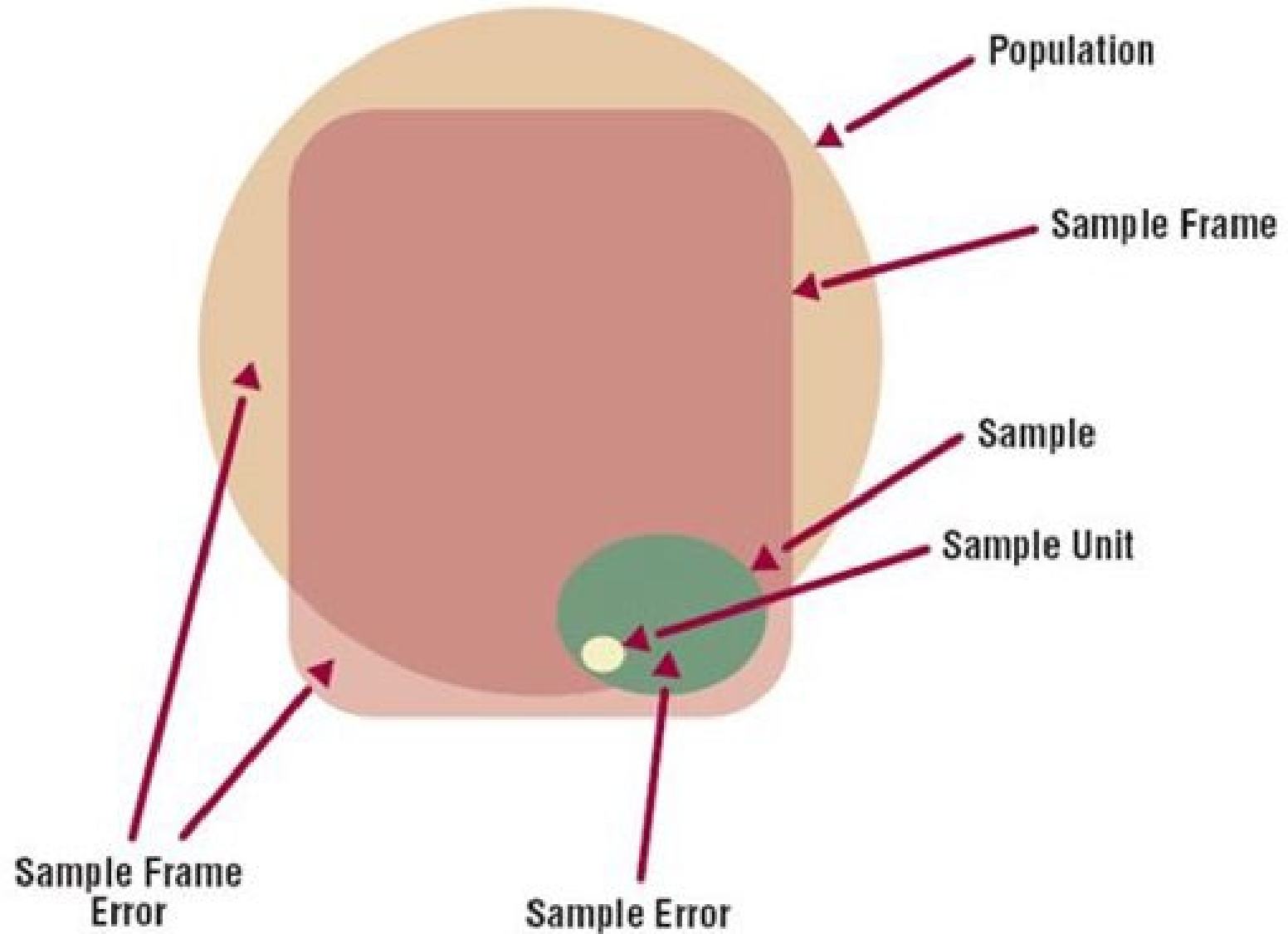
The estimates obtained are **not statistically projectable to the population**.

2. Probability sampling - Each element of the population has a **fixed probabilistic chance of being selected** for the sample.

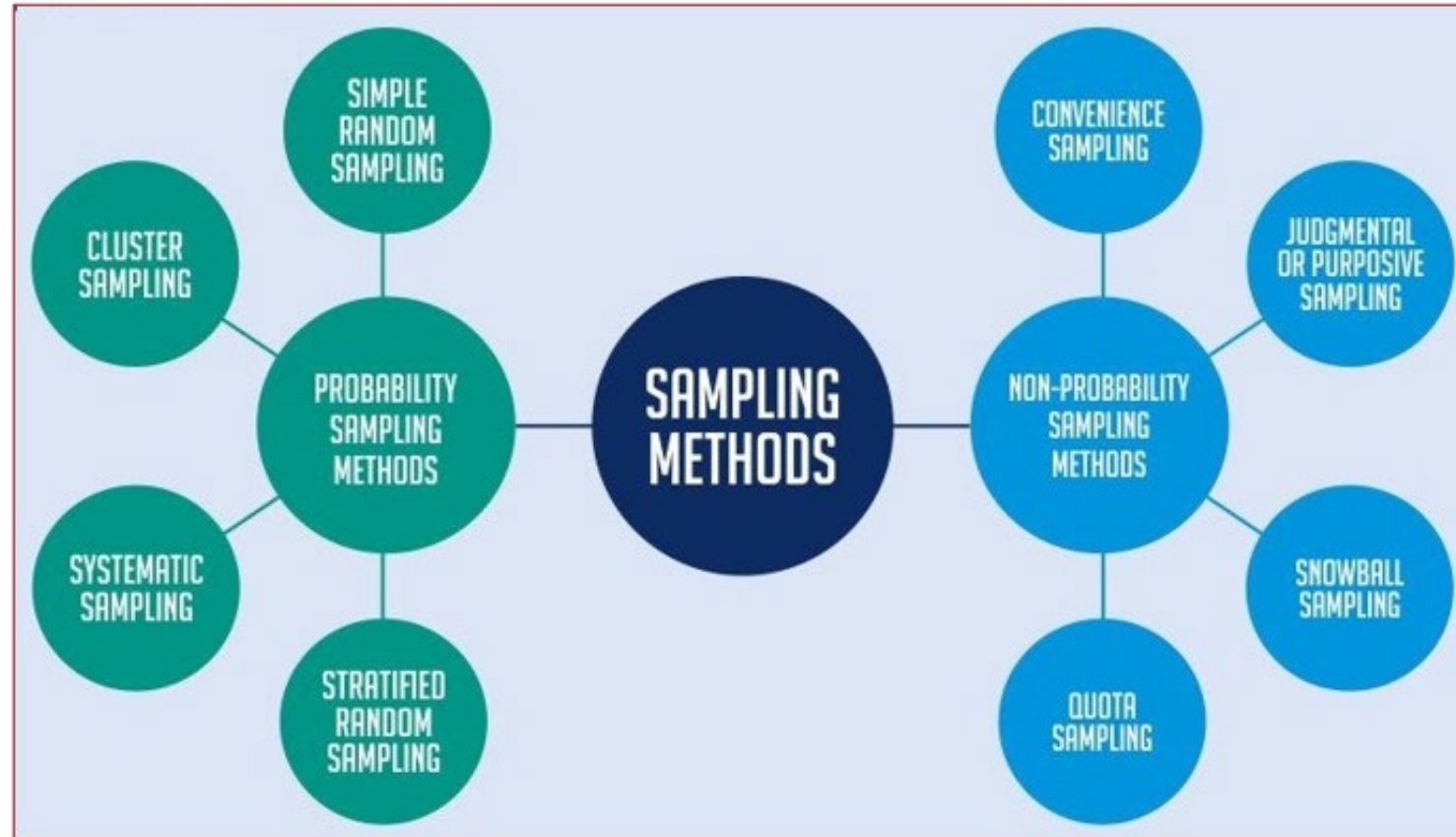
The **projections about the population** from which the sample was drawn **can be made**.

Sampling

- Population
- Census
- Sampling frame
- Sampling frame error
- Sample unit
- Sample element
- Sample error



Sampling



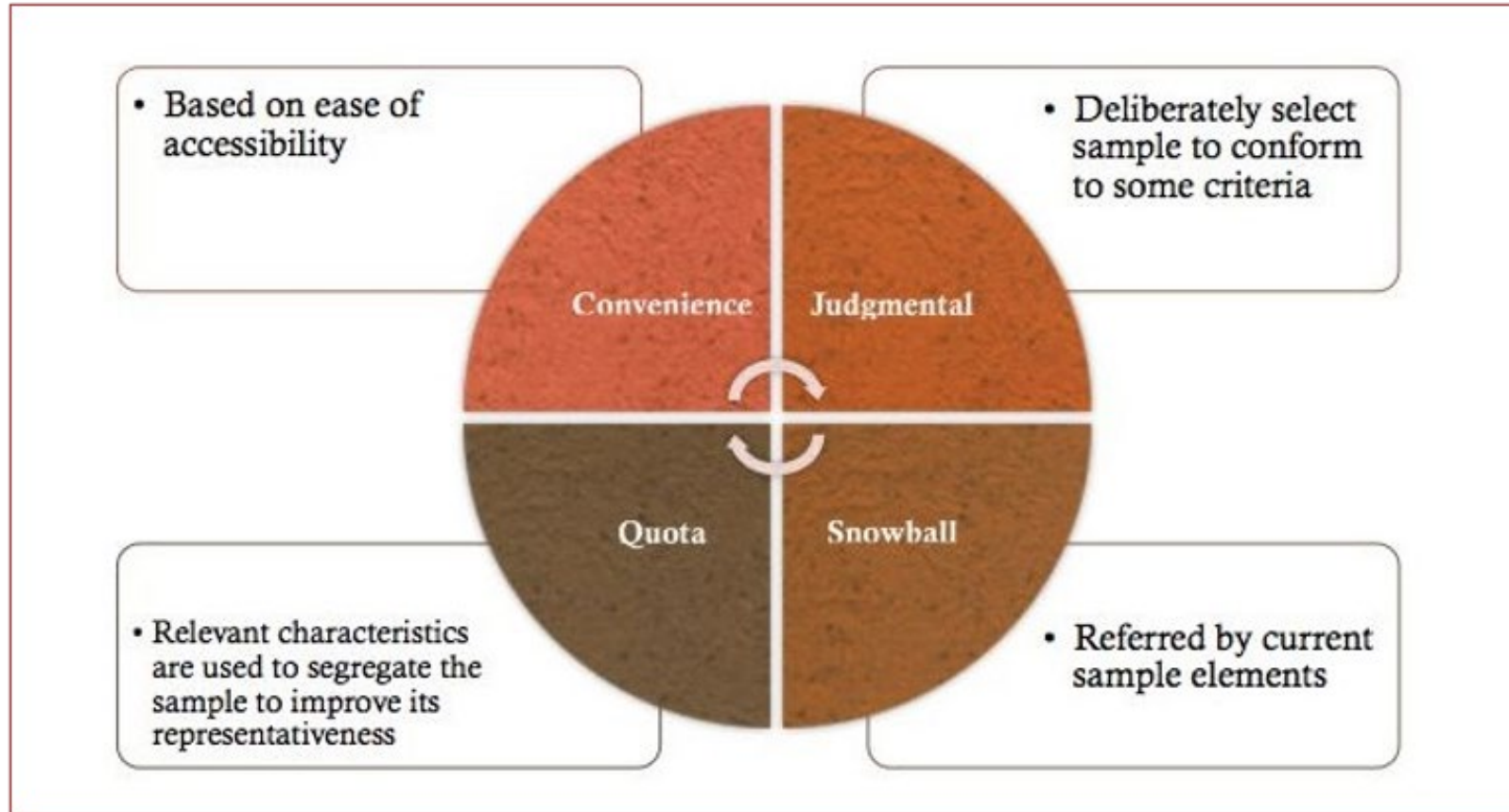
Sampling in Qualitative Research

Even if it were possible, it is not necessary to collect data from everyone in a community in order to get valid findings.

In qualitative research, only a sample (that is, a subset) of a population is selected for any given study.

The study's research objectives and the characteristics of the study population (such as size and diversity) determine which and how many people to select. Three of the most common sampling methods used in qualitative research: purposive sampling, quota sampling, and snowball sampling.

Non Probability Sampling



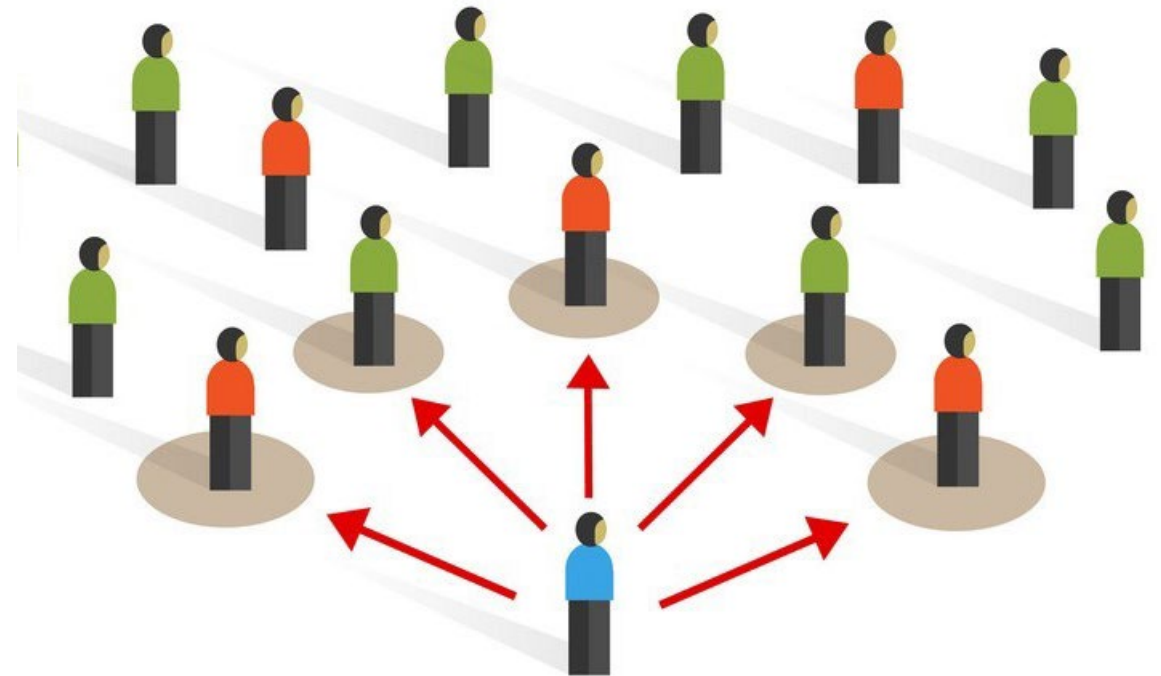
Non-probability Convenience Sampling

Subjects are selected because of their **convenient accessibility and proximity to the researcher**. Participants are selected because they happen to be in the right place at the right time (friends, family, colleagues, students, street interviews, radio or TV listeners, tear-out questionnaires...).

It is the **least expensive** and time consuming.

Not recommended for causal or descriptive research, **only for exploratory research** (generating ideas, creating hypothesis).

Convenience sampling



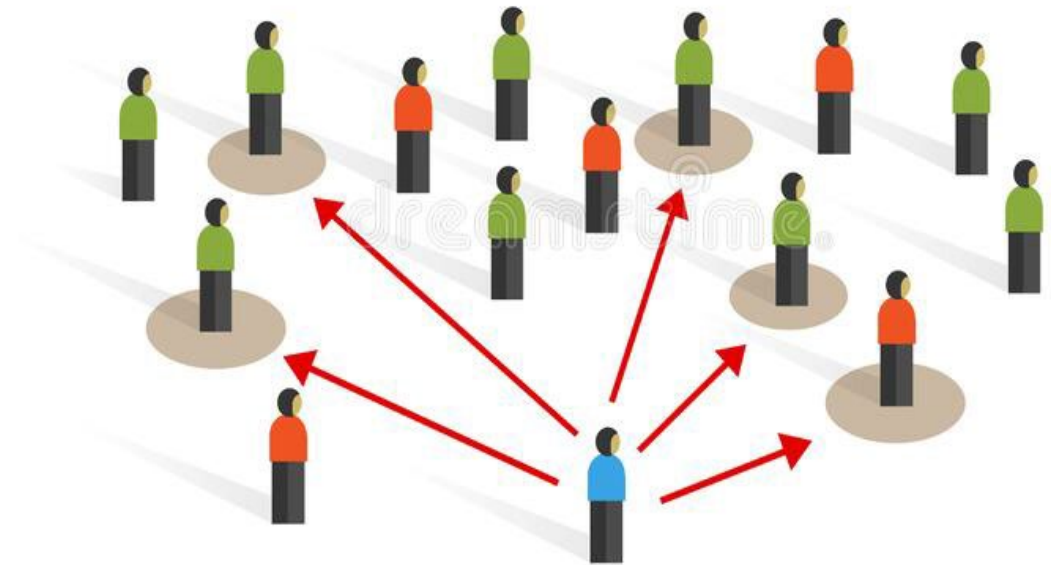
Non-probability Judgemental or Purposive Sampling

The population elements are **purposely selected based on the judgement** of the researcher.

The researcher chooses the elements of the sample he/she believes they are representative of the population of interest (often used in B2B - test markets selected for a new product, boutiques or flagship stores for a new merchandising display system, product testing with highly demanding customers).

It is relatively **inexpensive and fast, but subjective**, depends on the judgement of the researcher.

Purposive sampling



Bias

Bias /'bʌɪəs/ - *noun*

Inclination or prejudice for or against one person or group, especially in a way considered to be unfair.

"there was evidence of **bias against** foreign applicants"

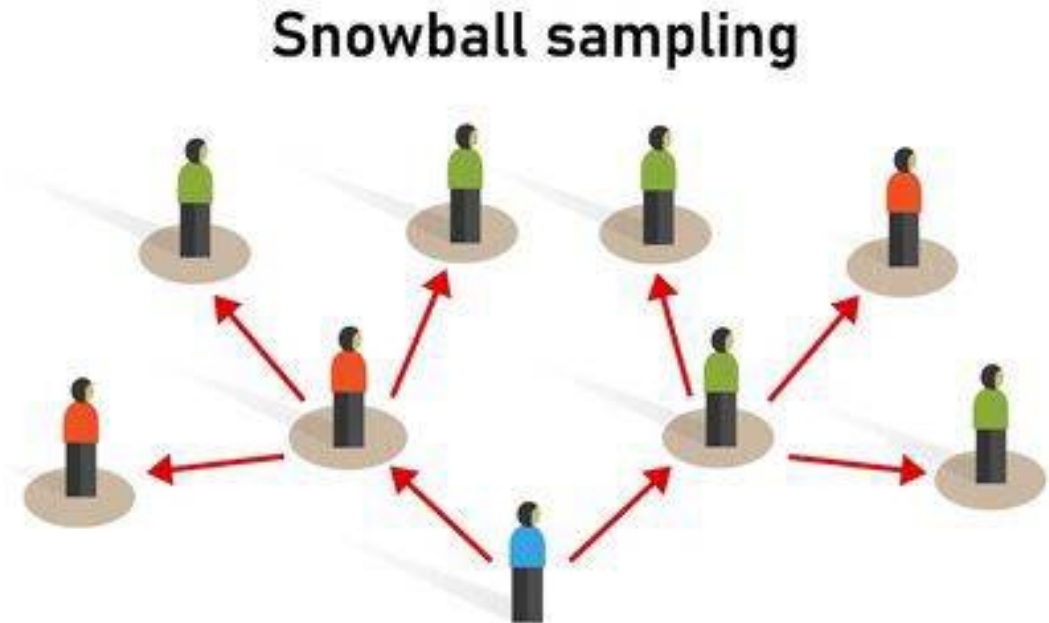
Similar:

Prejudice
Partiality
Partisanship
Favouritism
Unfairness

Non-probability Snowball Sampling

An **initial group** of participants is **selected randomly** or targeted at a few individuals who are known to possess the desired characteristics of the target population. After being interviewed, these participants are asked to **identify others** who also belong to the target population of interest. **Subsequent participants are selected based on the referrals.**

This process may be carried out in **waves**, thus leading to a **snowballing effect** (users of particular social services, e.g. parents who use nurseries or child carers whose names cannot be revealed, widowed males under 35).

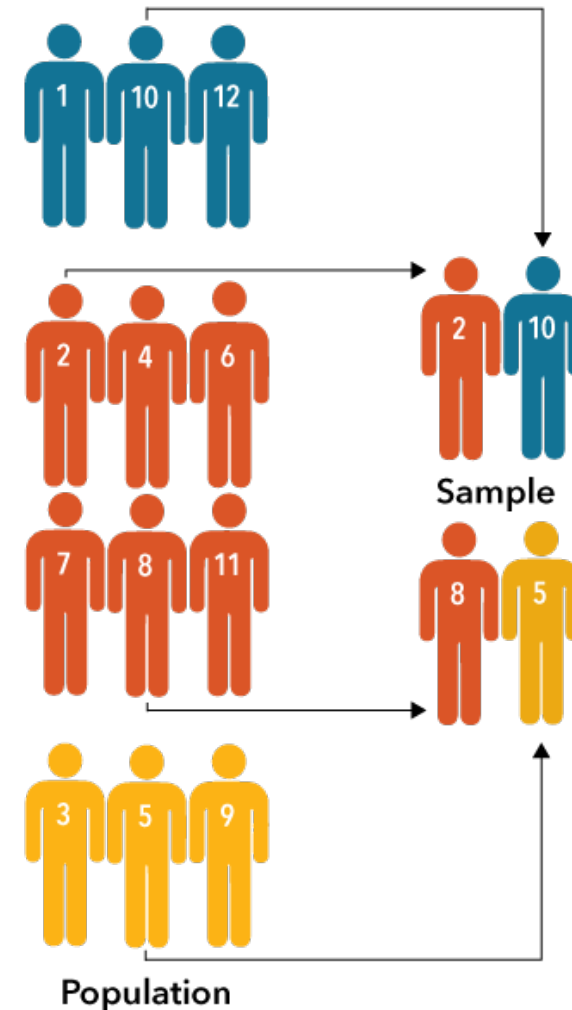


Non-probability Quota Sampling

It is a **two-stage restricted judgemental sampling**.

The first stage consists of **developing control categories or quotas** that ensure the composition of the sample is the same as the composition of the population (**mirroring**).

In **the second stage**, sample elements are **selected** based on **convenience or judgement**.



Because the elements within each quota are selected based on convenience or judgement, many sources of **selection bias are potentially present**.

Consent in Qualitative Research

In general, data collection activities that require more than casual interaction with a person require individual informed consent from that person. Examples of such activities include in-depth interviews and focus groups.

Individual informed consent may be written or oral.

Consent in Qualitative Research

The person should be told:

- the purpose of the research
- what is expected of a research participant, including the amount of time likely to be required for participation
- expected risks and benefits, including psychological and social (if there are any)
- the fact that participation is voluntary and that one can withdraw at any time with no negative repercussions
- how confidentiality will be protected
- the name and contact information of the local lead investigator to be contacted for questions or problems related to the research
- the name and contact information of an appropriate person to contact with questions about one's rights as a research participant (who is overseeing the research)

Model for Confidentiality

“You know, I always promise to keep what people tell me confidential, so I can’t tell you who else I have seen or what anyone has said. This also means that I will not be able to tell anyone that you and I had this interview, nor will I talk to anyone about what you tell me today.”



Interviewing

Interview participants thoroughly

- Obtain informed consent from each participant before the interview.
- Address all questions or topics listed in the interview guide.
- Brainstorm about questions participants could ask and think about how you would answer them.
- Ask follow-up questions (some of which may be scripted in the interview guide) in order to elicit participants' complete knowledge and experience related to the research topic.
- Probe participants for elaboration of their responses, with the aim of learning all they can share about the research topic.

Documenting Interview

Document the interview

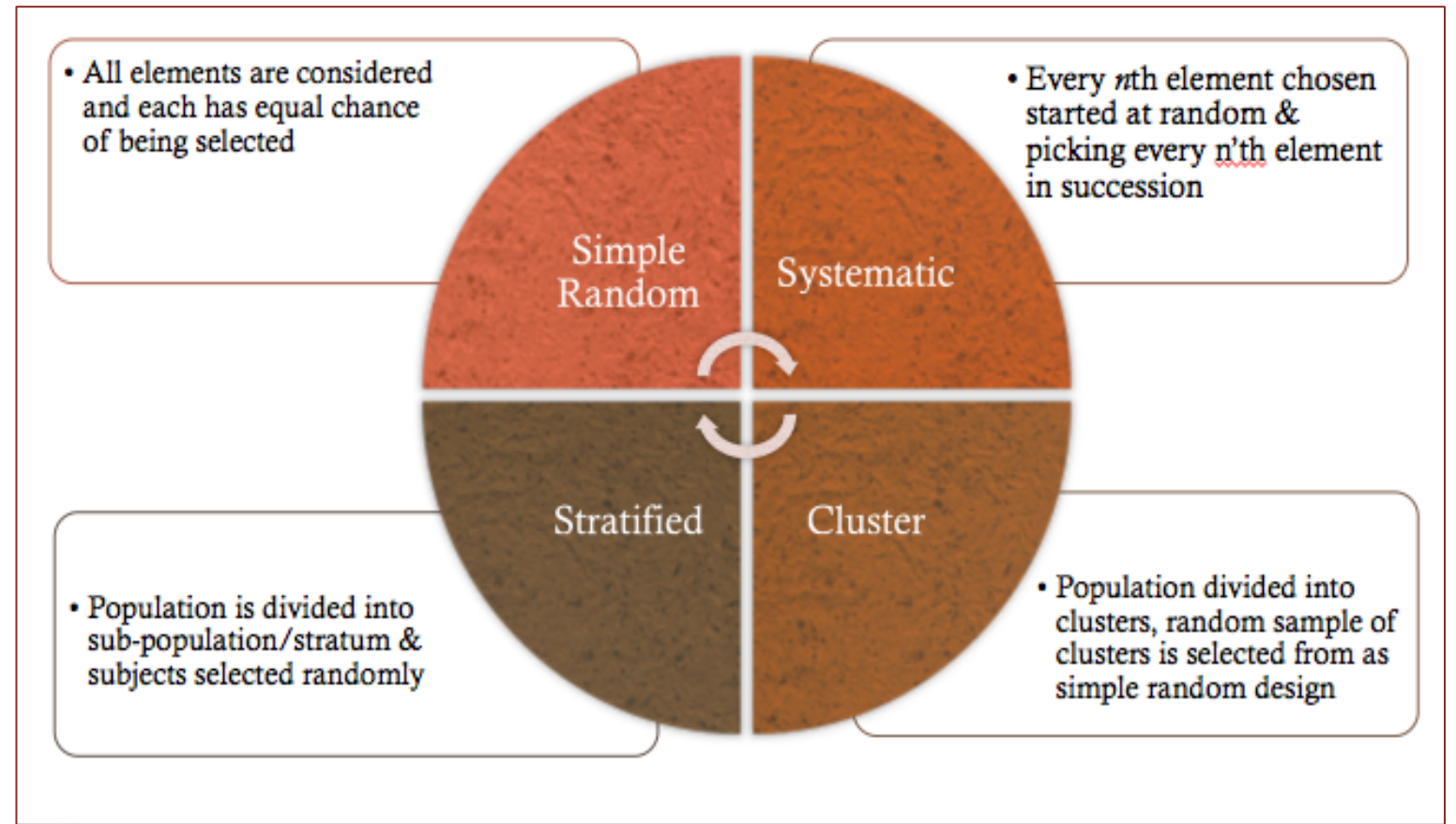
- Record the interview using an audio (and sometimes video) recorder.
- Take backup notes.
- Observe and document participants' behaviors and contextual aspects of the interview as part of your field notes.
- Expand your notes as soon as possible after each interview, preferably within 24 hours, while your memory is still fresh.

Probability Sampling

Sampling efficiency is a **trade-off** between sampling **cost** and **precision**.

The greater the precision,
the greater the cost.

The researcher should strive for the **most efficient sampling design**, **subject to the budget allocated**.



Probability Sampling Methods

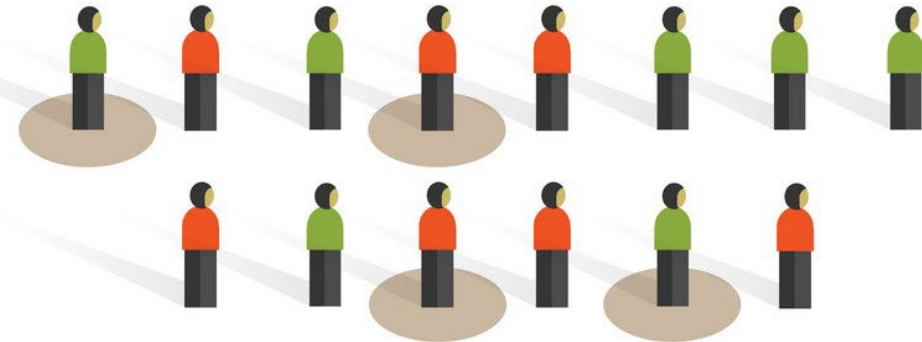
Simple Random Sampling

Each element in the population has a known and equal probability of selection.

The researcher first compiles a **sampling frame** in which **each element is assigned a unique identification number**. Then random numbers are generated to determine which elements to include in the sample.

The random numbers may be generated with a **computer routine** or a table. This method is equivalent to a **lottery system**.

Simple random sampling



Simple Random Sampling (SRS)

It is **easily understood** and the sample results may be projected to the target population.

Four significant limitations:

1. **Difficult to construct a sampling frame** that will permit a simple random sample to be drawn.
2. It can result in **very large samples** spread over **large geographical areas**
3. Often results in **lower precision** than other probability sampling techniques.
4. May or may not result in a representative sample (if the size of the sample is small).

For these reasons, SRS is **not widely used** in marketing research.

Simple Random Sampling (SRS)

Formula for simple random sample selection probability:

Probability of selection = sample size / population size

Example:

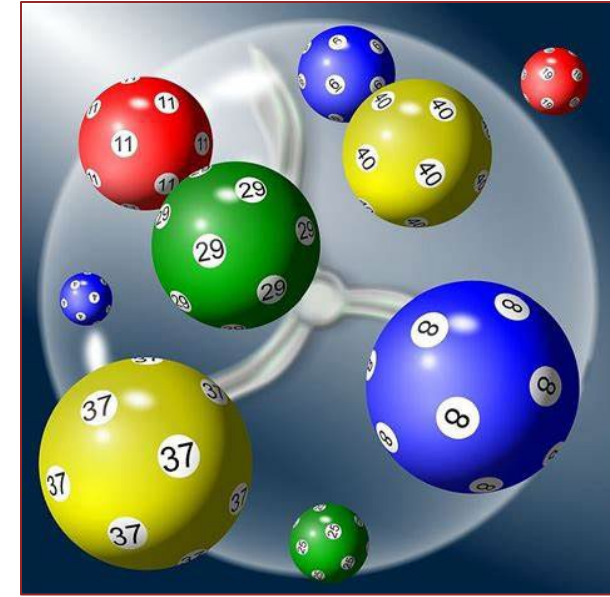
Population 100,000 recent Kindle Buyers

Sample size 1,000 respondents

Probability $1,000/100,000=1/100$ 1%

Random device method (flipping of a coin, lottery numbers) and random number method.

Random digit dialing (RDD)



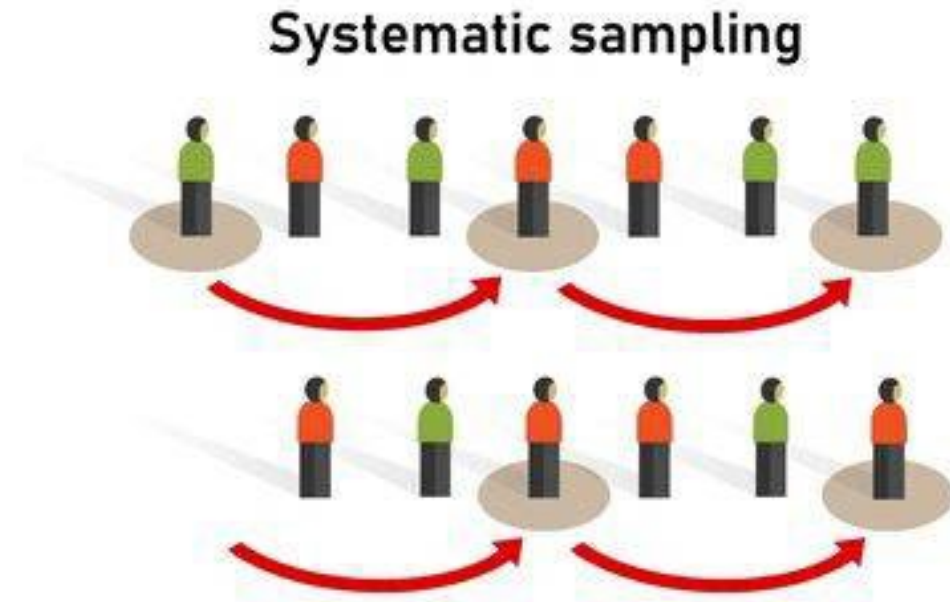
Probability Sampling Methods

Systematic Sampling

The sample is chosen by **selecting a random starting point and then picking every i -th element** in succession from the sampling frame.

The sampling interval, i , is determined by dividing the population size N by the sample size n and rounding to the nearest whole number.

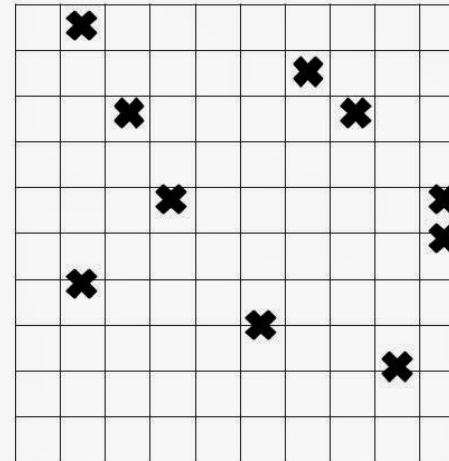
For example, $N=100,000$ and sample is $n=1,000$. In this case, the sampling interval, i , is 100. A random number between 1 and 100 is selected. If, for example, this number is 23, the sample consists of elements 23, 123, 223, 323, 423, 523 and so on.



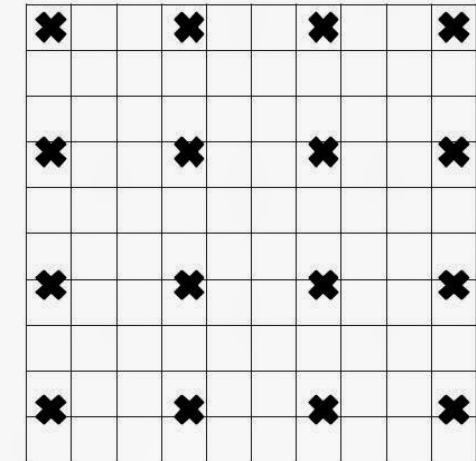
Probability Sampling Methods

Systematic Sampling

For this method a hard-copy listing of a population is necessary (database, address book, etc.). It is **efficient** because it employs a random starting point. It is also **circular**, researcher can go again from the beginning of the list following the skip interval.



Random sampling



Systematic sampling

skip (sampling) interval = population list size / sample size

The difference between the simple random sampling and systematic random sampling is in the words systematic and random. The systematic random sampling uses the skip interval, while simple random sampling is used by successive random draws.

Probability Sampling Methods

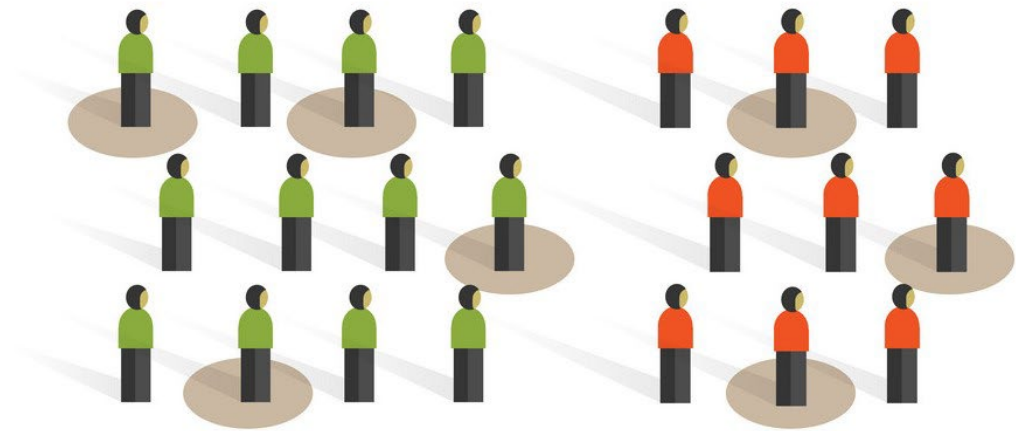
Stratified Random Sampling

Stratified sampling is a **two-step process** in which the population is partitioned into **subpopulations, or strata**.

The strata should be mutually exclusive and collectively exhaustive in that every population element should be assigned to one and only one stratum and no population elements should be omitted.

Next, **elements are selected from each stratum by a random procedure**, usually Simple Random Sampling.

Stratified sampling



A major objective of stratified sampling is to increase precision without increasing cost.

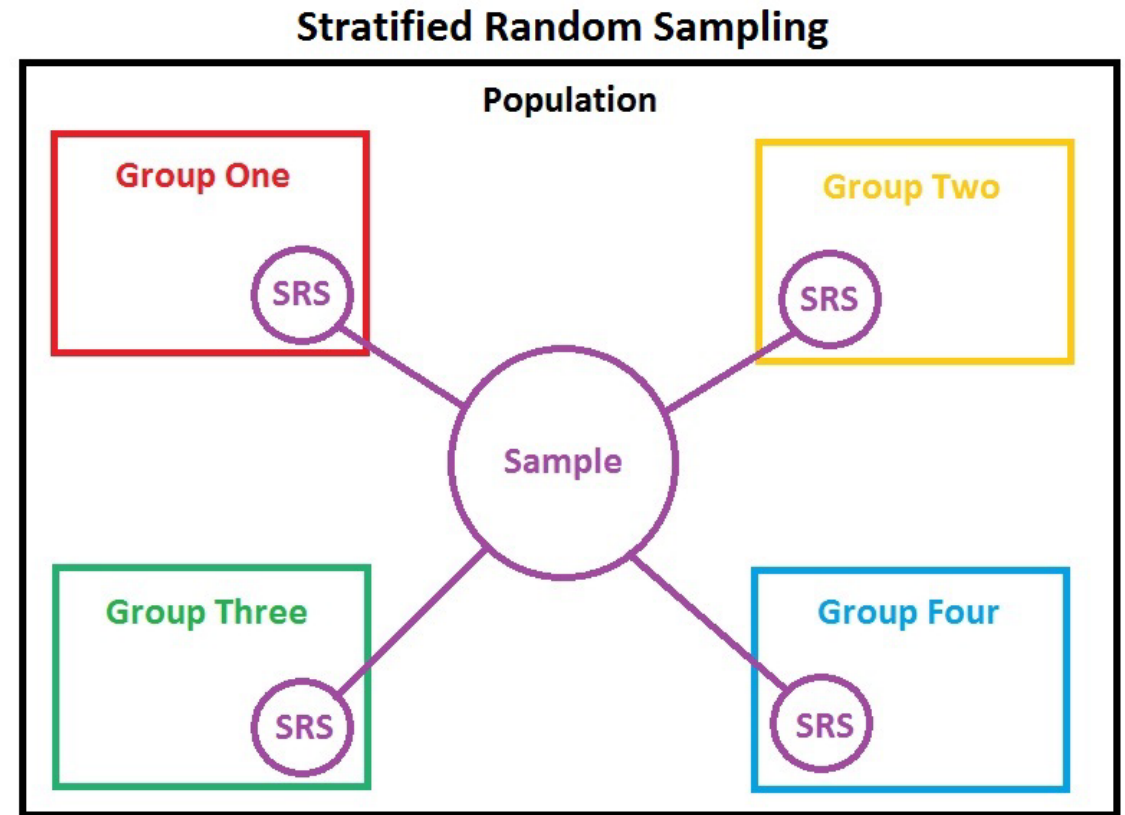
Probability Sampling Methods

Stratified Random Sampling

Area sampling is a form of stratified sampling. The researcher divides population into geographic areas (cities, neighbourhoods, etc.)

There are two options:
One-step area sample
Two step area sample

Disadvantage of cluster sampling is when clusters are not homogeneous (example choosing the most luxurious neighbourhood only).



Probability Sampling Methods

Cluster Sampling

A two-step probability sampling technique where the **target population is first divided** into mutually exclusive and collectively exhaustive **subpopulations called clusters**, and then a random sample of clusters is selected based on a Simple Random Sampling.

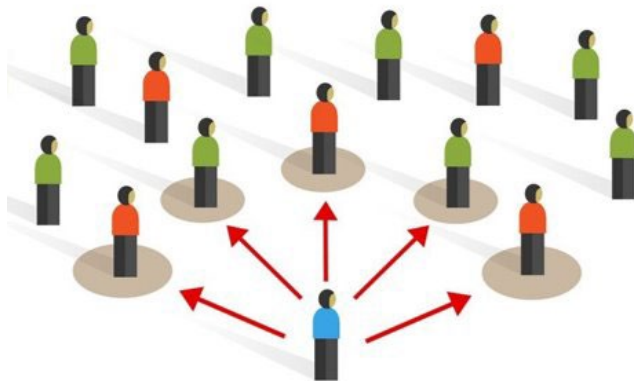
For each selected cluster, either **all the elements are included** in the sample, or a sample of elements is drawn probabilistically.



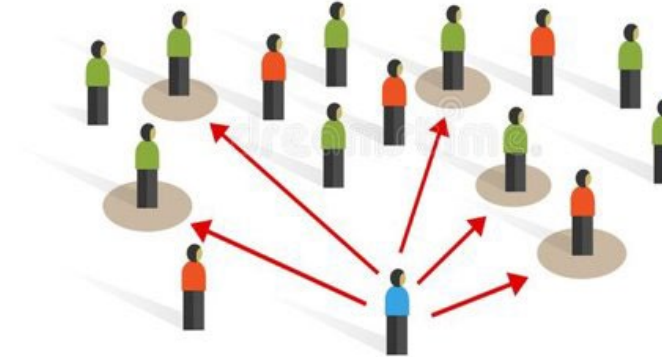
Stratified Sampling Vs Cluster Sampling

Sampling – Non-probability

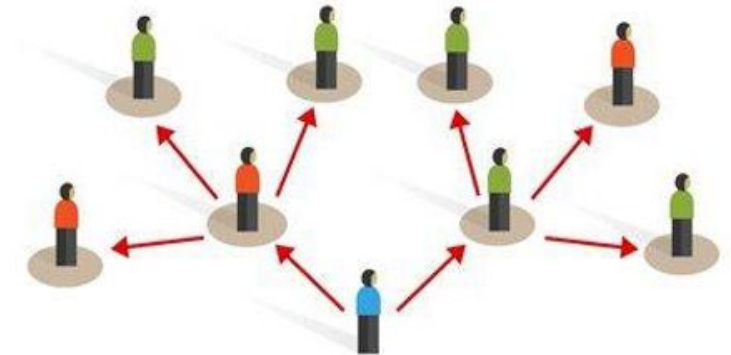
Convenience sampling



Purposive sampling



Snowball sampling



Sampling

Sample size decision is a compromise between what is theoretically perfect and what is practically feasible. Only a probability sample, typically referred as *random sample* is truly representative of a population.

A typical question: "How large a sample should have to be to be representative?"

LARGE SAMPLE BIAS – false belief that sample size determines sample representativeness

- Sample size has nothing to do with sample representativeness, it affects sample **ACCURACY**.
- **Sample accuracy** measures how closely it reports the true values of the population it represents.
- **Sample representativeness** is determined not by size, but by the sample selection method.

Reliable and Valid

Reliable measures obtain **identical or very similar responses** from the same respondent.

If a question obtains a very different answer from the same respondent, knowing that the respondent is unchanged between administrations—it is unreliable.

Valid measures are truthful. **Validity** is the **truthfulness of responses**.

Reliable and Valid

How is reliability different from validity?

- Reliable but not valid



- Reliable and valid



Reliable and Valid

Reliability & Validity



Evaluating the validity and reliability of research data

Errors

"The only perfectly accurate sample is census."

Two types of errors:

1. **Nonsampling error** – all types of errors other than sample method and sample size.

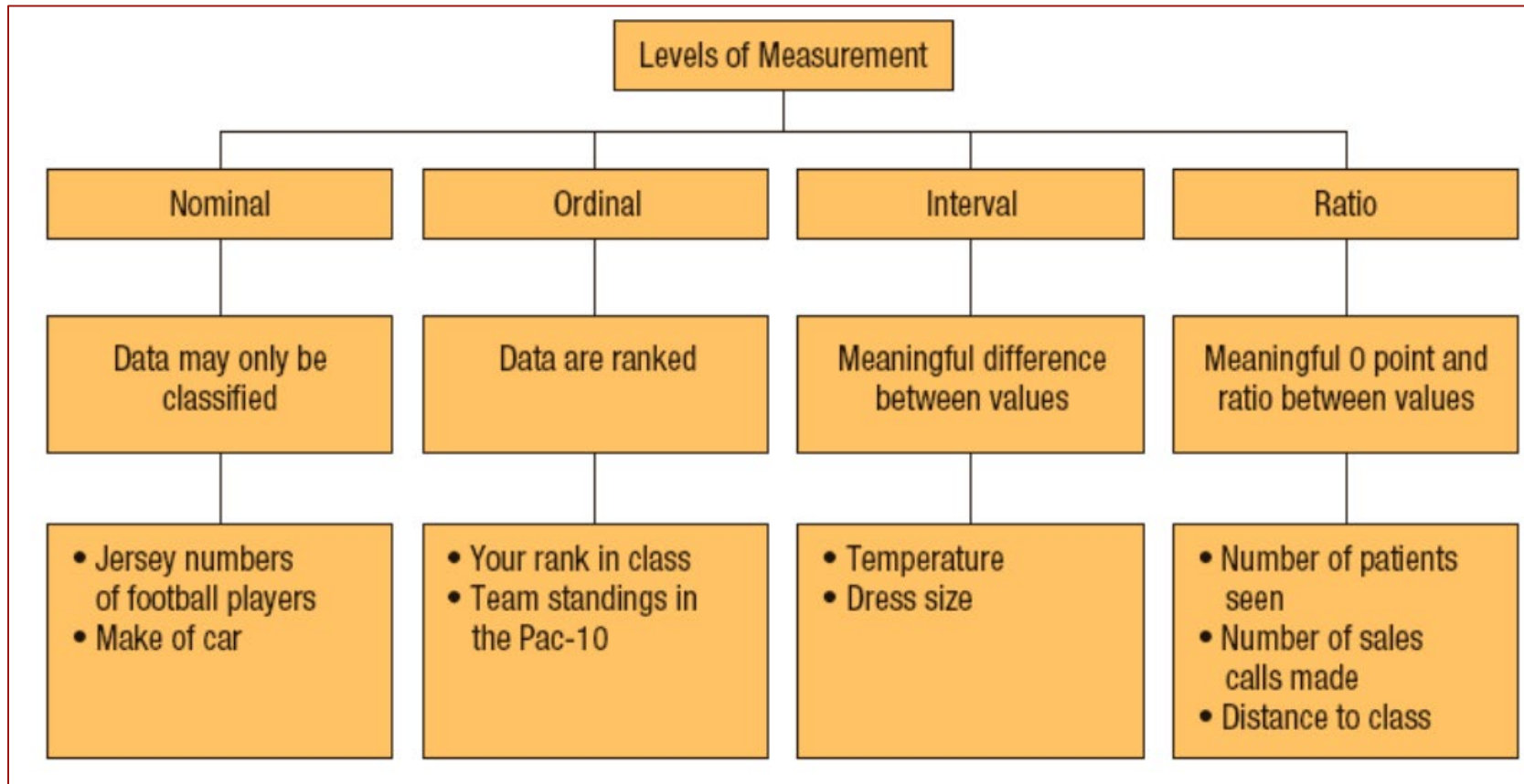
- Problem specification
- Question bias
- Data recording
- Incorrect analysis

2. **Sampling error** – includes **sample method error** and **sample size error**.

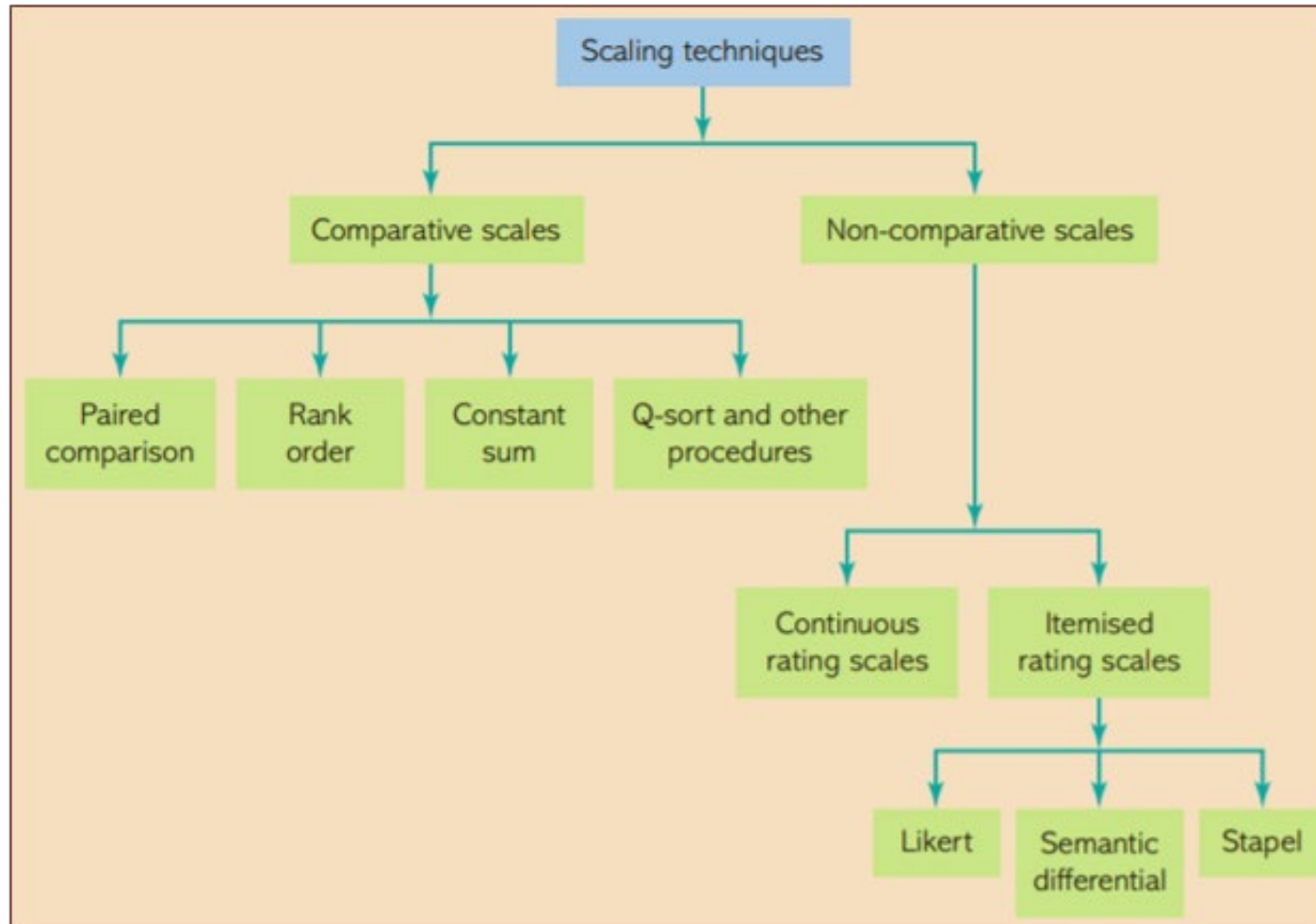
- In census all members of a population are involved, so there is no sample error.

"A random sample will always have some inaccuracy, which is referred to as sample error."

Measuring



Scaling



Likert Scales

- Very commonly used in market research.
- Measures **intensity of agreement or disagreement** with a statement.
- It is a **symmetrical** agree-disagree scale.
- American psychologist **Rensis Likert** was a father of the scale.
- Measures **how respondents behave and think**.

I think this 5-point Likert scale question is an excellent survey question style.

Strongly Disagree Disagree Neutral Agree Strongly Agree

I prefer 7-point Likert scales over their 5-point brethren.

Strongly Disagree Disagree Somewhat Disagree Neutral Somewhat Agree Agree Strongly Agree

- **Dilemma - offer even (4,6) or odd (5,7) number of response options?**
- What do you obtain when not offering a middle point? **Respondents must position themselves.**

Useful Likert Scales

Level of Acceptability

- 1 – Totally unacceptable
- 2 – Unacceptable
- 3 – Slightly unacceptable
- 4 – Neutral
- 5 – Slightly acceptable
- 6 – Acceptable
- 7 – Perfectly Acceptable

Level of Appropriateness

- 1 – Absolutely inappropriate
- 2 – Inappropriate
- 3 – Slightly inappropriate
- 4 – Neutral
- 5 – Slightly appropriate
- 6 – Appropriate
- 7 – Absolutely appropriate

Level of Importance

- 1 – Not at all important
- 2 – Low importance
- 3 – Slightly important
- 4 – Neutral
- 5 – Moderately important
- 6 – Very important
- 7 – Extremely important

My beliefs

- 1 – Very untrue of what I believe
- 2 – Untrue of what I believe
- 3 – Somewhat untrue of what I believe
- 4 – Neutral
- 5 – Somewhat true of what I believe
- 6 – True of what I believe
- 7 – Very true of what I believe

Priority:

- 1 – Not a priority
- 2 – Low priority
- 3 – Somewhat priority
- 4 – Neutral
- 5 – Moderate Priority
- 6 – High priority
- 7 – Essential priority

Level of Concern

- 1 – not at all concerned
- 2 – Slightly concerned
- 3 – Somewhat concerned
- 4 – Moderately concerned
- 5 – Extremely concerned

Level of Support/Opposition

- 1 – Strongly oppose
- 2 – Somewhat oppose
- 3 – neutral
- 4 – Somewhat favor
- 5 – Strongly favor

Level of Probability

- 1 – Not probable
- 2 – Somewhat improbable
- 3 – Neutral
- 4 – Somewhat probable
- 5 – Very probable

Level of Agreement

- 1 – Strongly disagree
- 2 – Disagree
- 3 – Neither agree or disagree
- 4 – Agree
- 5 – Strongly agree

Level of Desirability

- 1 – Very undesirable
- 2 – Undesirable
- 3 – neutral
- 4 – Desirable
- 5 – Very desirable

Useful Likert Scales

Level of Agreement

- 1 – Strongly disagree
- 2 – Disagree
- 3 – Somewhat disagree
- 4 – Neither agree or disagree
- 5 – Somewhat agree
- 6 – Agree
- 7 – Strongly agree

Knowledge of Action

- 1 – Never true
- 2 – Rarely true
- 3 – Sometimes but infrequently true
- 4 – Neutral
- 5 – Sometimes true
- 6 – Usually true
- 7 – Always true

Reflect Me?

- 1 – Very untrue of me
- 2 – Untrue of me
- 3 – Somewhat untrue of me
- 4 – Neutral
- 5 – Somewhat true of me
- 6 – True of me
- 7 – Very true of me

Priority Level

- 1 – Not a priority
- 2 – Low priority
- 3 – Medium priority
- 4 – High priority
- 5 – Essential

Level of Problem

- 1 – Not at all a problem
- 2 – Minor problem
- 3 – Moderate problem
- 4 – Serious problem

Affect on X

- 1 – No affect
- 2 – Minor affect
- 3 – Neutral
- 4 – Moderate affect
- 5 – Major affect

Level of Consideration

- 1 – Would not consider
- 2 – Might or might not consider
- 3 – Definitely consider

Level of Participation

- 1 – No, and not considered
- 2 – No, but considered
- 3 – Yes

Frequency – 5 point

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

Frequency

- 1 – Never
- 2 – Rarely
- 3 – Occasionally
- 4 – A moderate amount
- 5 – A great deal

Frequency of Use

- 1 – Never
- 2 – Almost never
- 3 – Occasionally/Sometimes
- 4 – Almost every time
- 5 – Every time

Paired Comparison Scaling

You can ask a participant to **select one out of two objects** according to some criterion.

Example: Ease of use / Cost

Durability / Aesthetics

The researcher can calculate the **percentage of participants who prefer one stimulus over another**.

	Ease of use	Maintains temperature	Durable	Cost	Aesthetics	Total
Ease of use	—	1	1	1	1	
Maintains temperature	0	—	0	0	0	
Durable	0	1	—	1	1	
Cost	0	1	0	—		
Aesthetics	0	1	0		—	

1 Row of the more important objective

0 Row of the less important objective

Rank Order Scaling

Participants are presented with **several objects simultaneously** and asked to order or **rank them** according to some criterion.

Participants assign a rank of:

- 1** to the most-preferred
- 2** to the second-most-preferred
- n** the least preferred

Please rank below features of a fitness tracker in order of most important to least important.

Measuring steps	2	▼
Calories burned	3	▼
Measuring heartbeat	1	▼
Tracking exercise	4	▼
Measuring distance	5	▼

[Done](#)

Rank order scaling also results in **ordinal data**.

Compared with paired comparisons, this type of scaling process more **closely resembles the shopping environment**.

It also **takes less time** and eliminates intransitive responses. Participants **easily understand the instructions** for ranking.

Constant Sum Scaling

You can ask **participants to allocate points** (or euros), among a set of stimulus objects with respect to some criterion. Participants may be **asked to allocate 100 points** to attributes in a way that reflects the importance they attach to each attribute. If an attribute is unimportant, the participant assigns it **zero points**. If an attribute is twice as important as some other attribute, it receives twice as many points. The sum of all the points is 100.

Here two examples: scale construction scale and analysis per segments:

Attribute	Points
Mileage	
Seating capacity	
Luggage space	
Proximity of dealer	
Servicing network	
TOTAL	100

MEAN POINTS ALLOCATED				
	Attribute	Segment I	Segment II	Segment III
1	Bitterness	8	2	17
2	Hop flavours	2	4	20
3	Fragrance	3	9	19
4	Country where brewed	9	17	4
5	Price	53	5	7
6	High alcohol level	7	60	9
7	Aftertaste	5	0	15
8	Package design	13	3	9
	Sum	100	100	100

Disadvantage: **Participants may allocate more or fewer units** than those specified.
For example, a participant may allocate 108 or 94 points.

Continuous Rating Scale

In a **continuous rating scale**, also called **graphic rating scale**, participants rate objects by **placing a mark on the continuum** from one extreme of the criterion to another. Participants are not restricted by the marks previously set by the researcher. They are easy to set, but provide little new information.



Itemised Rating Scale

Itemised rating scale is a measurement scale having **numbers or brief descriptions** associated with **each category**.

The categories are ordered in terms of **scale position**.
They are **widely used** in marketing research.

The **most commonly used** itemised rating scales:

1. Likert scales
2. Semantic differential scales
3. Stapel scales

Itemised Graphic Scale	Itemised Verbal Scale	Itemised Numeric Scale
 Favourable	Completely satisfied	-5
	Somewhat satisfied	-4
		-3
		-2
 Indifferent	Neither satisfied nor dissatisfied	-1
		0
	Somewhat dissatisfied	+1
		+2
 Unfavourable	Completely dissatisfied	+3
		+4
		+5

Semantic Differential Scales

If you opt to construct a semantic differential scale begin with the **determination of a concept** or object to be rated. Select **bipolar pairs of words or phrases** to **describe the object**. The opposites are positioned at the endpoints of a **continuum of intensity**. Commonly 5-7 points are used to separate them.

Examples: Convenient /Inconvenient
High quality / Low quality
Dependable / In dependable

Uses: to measure brand perception, store image, etc.



Basic Data Analysis

For describing and analyzing your data set you might use the basic statistics:

- Measures of position (also referred to as central tendency measures)
- Measures of spread (also referred to as variability measures)
- Measures of shape

With the **measures of position** you can see where the data is centered in your data set.

Despite the common use of an arithmetic mean, you might be using different measures:

- **Mean** (arithmetic mean)
- **Median**
- **Mode**

Measures of spread will give you information how data in your data set variate.

You can use it to determine the indicator of the quality of product/services and as a reference to improve it.

- **Range**
- **Standard Deviation**

Basic Data Analysis

Mean	Median	Mode	Range
$\text{Mean} = \frac{\text{Total of all values}}{\text{number of values}}$ 3, 3, 4, 5, 5, 8, 9, 15 $\text{Mean} = \frac{52}{8} = 6.5$	Median = Middle value (Numbers written in order) 3, 3, 4, 5, 5, 8, 9, 15 ↓ Median = 5	Mode = Most common value/item 3, 3, 4, 5, 5, 8, 9, 15 Mode = 3 and 5	Range = Largest - Smallest 3, 3, 4, 5, 5, 8, 9, 15 Range = 15 - 3 = 12
Collect it all together and share it out evenly	Finds the middle value	Average usually used for qualitative data	Reveals how close/far apart the values are
Using the mean to find the total amount	Use of formula to find location of median	Occurrence of no mode	Interpreting measures of spread
$\text{Mean} \times \text{Number of values}$ Ezytown FC have scored an average of 3.8 goals per game in their last 15 matches. How many goals have they scored? $3.8 \times 15 = 57 \text{ goals}$	$\text{Location} = \frac{n + 1}{2}$ The median of 45 values would be the 23rd number when written in order $\frac{45 + 1}{2} = 23$	If every value appears equally, there is no mode 1, 1, 3, 3, 7, 7 Each value appears twice so there is no mode	The Smaller the range, the closer and more 'consistent' the values are. The Larger the range, the more varied and more 'inconsistent' the values are.

Survey Tools

There are many, the choice is yours. Watch out for the amount of questions supported by the free version, as well as the number of responses available to obtain.



10 Best Survey Tools & Software in 2023 - Mentimeter

Survey Tools



SurveyMonkey - you can **include only 10 questions per survey**, and the **maximum number of responses you can view tops out at 100**.



Typeform - The free version is limited to **100 responses per month**, and 10 questions per survey.



Google Forms do not have a limit as such, the data is held in a Google Sheet with 5 million line capacity.

Why Google Forms?

- Benefit of Google Forms is the ability for users to design and edit their surveys on mobile.
- Google Forms excels cross-platform.
- While not the most thrilling design, this survey tool can be shared and responses analyzed easily

How to do online surveys in Google Forms?

- Google Forms is a free online software for creating surveys and questionnaires.
- You need a Google account to make a Google Form, but you don't necessarily need an account to complete a form.
- You can personalize your Google Form with question types, a header image, and a color theme.
- Google Forms differentiates itself from similar online software through its library of customization options.
When creating your new form, you'll have the ability to select from a series of templates or design your very own.
If you choose to make a new template, consider adding your logo and photos, and a custom color set to match.
- There is a way to organize your forms through Google Forms' section tool. These can be helpful for longer surveys, as they break questions up into manageable chunks.
- Once you're ready to share your Google Form, click on the Send button at the top right of the screen. You send the Form via email, copy a link, or copy an embedded HTML code to add the form to your website or blog.



Respondents Errors

Intentional

- **Falsehoods** (privacy, fear of interviewer having a secret agenda, embarrassing situation)
- **Non-response** (partial or total, all types of data collection, major preoccupation of market researchers today)

Control – Guarantee anonymity and confidentiality, incentives, validation, 3rd person technique

Unintentional

- Misunderstanding
- Guessing (not having enough information on the topic)
- Distractions
- Fatigue

Control – Instruction examples, reversals of scale endpoints, **promptomers** (we are almost finished, this was the most difficult question!)

Non-Response Error

Refusal to participate (sensitive topic, privacy issues, no incentive)

- People may be **busy** or have **no interest** in the survey
- They may be **turned off** by the **interviewer's voice** or **approach**
- The survey topic may be overly **sensitive**
- May be a **standard response** for some people
- May be the result from negative **previous** survey participation **experiences**
- People may decline to participate because they do not want to take the time or regard surveys as an **intrusion of their privacy**
- There is **no incentive** – **what would be an incentive for your research?**



Non-Response Error

2. Break-offs during the interview (long interviews, sensitive topics, complexity)

- The **interview may take longer** than the respondent initially believed. **Measure – be honest!**
- The topic and specific questions may prove to be distasteful, too personal, or boring
- The instructions may be confusing
- The survey may be too complex; or a sudden interruption may occur.



3. "Item omission" - Refusal to answer specific questions

It is useful for a researcher to offer the **"don't know"** option with some type of questions to reduce item omissions.

Completed interview – one in which **all the primary questions have been answered**

Question - What is the best length? **no more than 10 minutes**

Example of Error Detection

Case	Data Matrix Column Labels									Error Type—Description of Error
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	
A	1	2	3							<i>Break-off</i> —Questionnaire is incompletely filled out. No answers after Q3.
B	1	2	1		4	2		4	5	<i>Item omission</i> —The respondent refused to answer particular question(s) but answered others before and after it. Q4 and Q7 are not answered.
C	1	2	2	3	5	5	5	5	5	<i>Yea-saying</i> —Respondent exhibits persistence to respond favorably (yea) regardless of the questions. Q5–Q9 are all 5, the code for “Strongly agree.”
D	2	1	3	1	1	1	1	1	1	<i>Nay-saying</i> —Respondent exhibits persistence to respond unfavorably (nay) regardless of the questions. Q5–Q9 are all 1, the code for “Strongly disagree.”
E	2	1	3	1	3	3	3	3	3	<i>Middle-of-the-road</i> —Respondent indicates “no opinion” to most questions. Q5–Q9 are all 3, the code for “Neutral.”

Response Rates in Market Research

- Most marketing research report response rates.
- For many years there was a confusion about the calculation.
- There was no universal definition, different companies calculated it differently.
- Often **response rates** in survey research are calculated **simply by dividing the number of completed interviews** by the number of individuals who were selected to participate in the research, i.e. **the sample**.
- However, this method is **too simplistic** and does not do justice to the complexity of research design, sampling process and the practical difficulties of contacting and assessing potential survey participants.

CASRO Response Rates

Therefore in 1982 the Council of American Research Organization (**CASRO**) proposed **a method to better consider the various situations encountered in survey research**. This method formed the basis for the development of **a standard for the calculation of response rates**.

This method was adopted by the American Association for Public Opinion Research (**AAPOR**). This standard was further refined by the Institute for Social and Economic Research (**ISER**).

- **CASRO Response Rate Formula = N. of completed interviews / N. of eligible units in sample (Simple form)**

Eligible units are respondents determined by **screening** or **qualifying** questions.

Example: Do you use microwave? Have you used it in the last 3 months?

CASRO Response Rates

Example on a sample of 1000 shoppers:

Completions = 400

Ineligible = 300

Refusals = 100

Not reached = 200

CASRO response rate formula:

CASRO Response Rate Formula (Expanded Form)

$$\text{Response rate} = \frac{\text{completions}}{\text{completions} + \left(\frac{\text{completions}}{\text{completions} + \text{ineligible}} \right) \times (\text{refusals} + \text{not reached})}$$

Here are the calculations.

Calculation of CASRO Response Rate (Expanded Form)

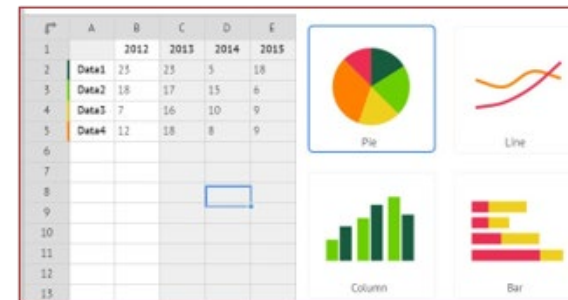
$$\begin{aligned} \text{Response rate} &= \frac{400}{400 + \left\{ \frac{400}{400 + 300} \right\} \{100 + 200\}} \\ &= \frac{400}{400 + (0.57)(300)} \\ &= 70.0\% \end{aligned}$$

Response Situations

- **Completed.** Rarely is an interview fully completed. According to the AAPOR system an interview is completed if the respondent was cooperative and at least 80% of the questions have been reliably and validly answered.
- **Partial.** At least between 50 and 80% of questions validly answered.
- **No-contact.** The eligibility and existence of the respondent could be confirmed but the respondent could not be contacted.
- **Refusal.** The respondent could be contacted and his or her eligibility could be assessed. The respondent refused to cooperate in the survey.
- **Break-off.** The respondent initially collaborated but refused later in the interview or the respondent could not be recontacted after an interview was suspended. Less than 50% of the questions have been answered.
- **Other.** The respondent could be contacted and his or her eligibility could be assessed. However, the respondent was unable to cooperate in the interview because of an illness or language problems. This category also includes interviews that were lost or invalidated.

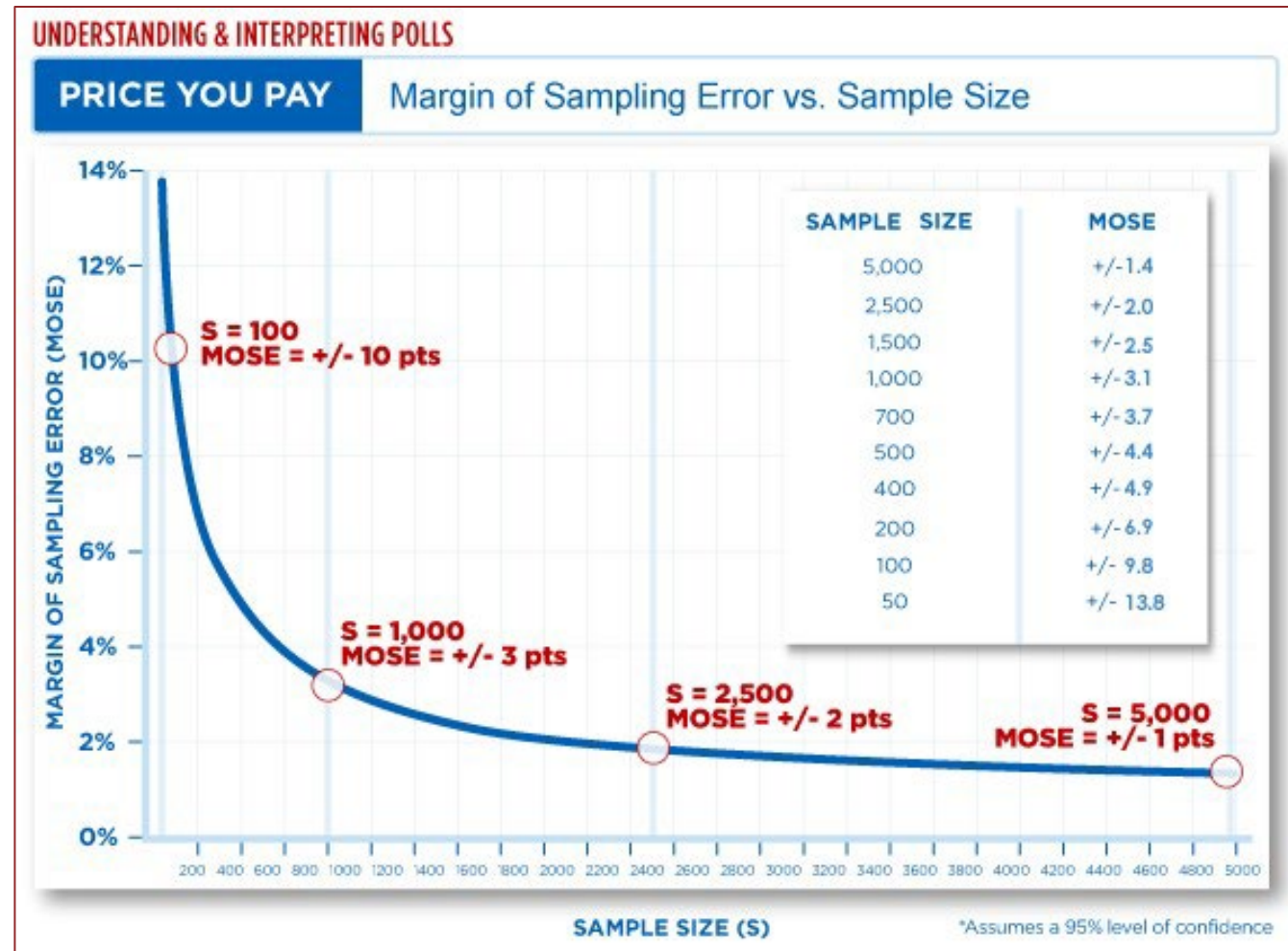
Report Visuals

1. **Tables** – Identify exact values and allow reader to compare numerical data
2. **Graphs and charts** – Illustrate relationships among values
3. **Pie charts** – Circle divided into sections. Illustrate relative sizes, compare specific part of the whole to the whole. It should have between 4 and 8 segments. If there are many small segments they should be combined into "Other" category.
4. **Bar charts** – Very commonly used. It shows magnitude of response, compares items over time or shows correlations between them.
5. **Line graphs**
6. **Maps** – define geographical locations
7. **Photographs**
8. **Drawings** – focus on visual details



The Relationship Between the Sample Size and Error

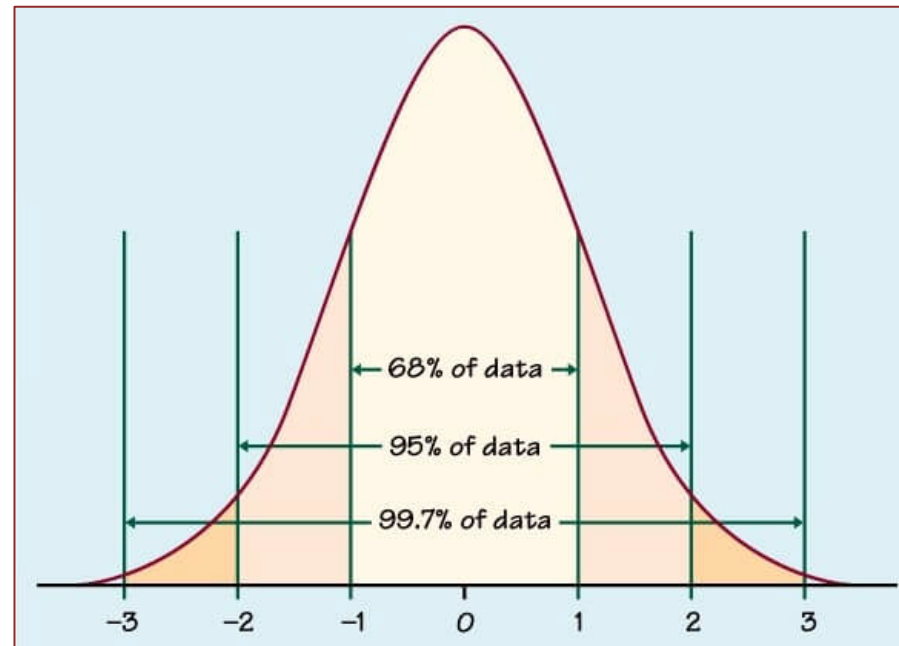
"The larger a random sample is, the more accurate it is (less sample error)."



Level of Confidence and Confidence Interval

"Take any finding in the survey, replicate the survey with a random sample of the same size and be very likely to find the same findings within +/-%range of the original finding."

The confidence interval allow the researcher to predict what would be found if a survey were replicated many times.



Level of Confidence and Confidence Interval

The **confidence level** tells you how sure you can be.

It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval.

The 95% confidence level means you can be 95% certain;
The 99% confidence level means you can be 99% certain.

Most researchers use the 95% confidence level.

Level of Confidence and Confidence Interval

The **confidence interval** (also called margin of error) is the plus-or-minus figure usually reported in newspaper or television opinion poll results.

For example, if you use a confidence interval of 4 and 47% percent of your sample picks an answer you can be "sure" that if you had asked the question of the entire relevant population between 43% ($47-4$) and 51% ($47+4$) would have picked that answer.

Your Eligibility Questions?

TAM SAM SOM

- **Total Addressable Market or TAM** = the total possible market for your product or service, without limitations based on geography, distribution or product limitations
- **Serviceable Available Market or SAM** = the portion of your TAM that your product or service can actually reach given your geography, capabilities, and other relevant limitations to your business
- **Serviceable Obtainable Market or SOM** = the portion of the market you are aiming to capture, which should be aligned with your market share target, ideal customer profile, and sales territory maps
- **Market share** = the part of the market that your product or service has

[TAM, SAM, SOM: What's the Difference? \(scalepath.io\)](https://scalepath.io)

What Will Be Your Deliverables?

#2 Prepare a **document** with **research questions (survey in Word format)** for your project.
Upload to VLE.

It will be commented by the lecturer by email.

#3 Prepare a detailed **a report on your research findings** (Word) and **TAM SAM SOM**.
Prepare a **PPT presentation of your findings**.

Tips for Conducting Market Research

Here are some tips that your startup can use to do market research:

- **Be clear:** Before beginning your market research, have clarity about your objectives.
- **Target audience:** Know your target audience – the who and the how many. Choose a sample for quality insights. Also, choose a relevant and representative sample.
- **Social media:** Don't ignore social media feedback on your research. Incorporate feedback you receive on social media.
- **Give it a personal touch:** Add a personal touch to the research. Say thank you at the end of the survey. Give respondents a background of the study at the beginning.
- **Use open-ended questions carefully, but use them:** Provide space for open-ended comments to help respondents express themselves fully.
- **Mixed research methodology:** Have a mix of qualitative and quantitative data collection and be open to discussion forums.
- **Embrace criticism:** Don't ignore criticism you receive on surveys. It is the most valuable and honest feedback you receive.
- **Reward respondents:** Use some sort of a reward as a motivation factor for your respondents.

Key Takeaways

- Marketing Research
- Internal and External Market Research Suppliers (DIY research, client-side research, agencies)
- Top companies
- Market research agencies' fields
- Market Research Ethics
- Decision-making and marketing research
- There are three types of marketing research: exploratory, descriptive, causal
- Exploratory research is the one that is performed often first (but not necessarily)
- Exploratory research is used for ambiguous problems
- Descriptive research is used when there is awareness of the problem
- Descriptive research serves to answer questions – who, what, why, where, etc.
- Causal research is used when a problem is clearly defined
- Causal research gives the answer to connection between variables (if we change one what happens)
- Qualitative and quantitative research
- There are eleven main steps in the marketing research process
- Steps must be followed creatively and systematically.
- Research brief

Key Points

- Frasing questions
- Sampling
- Fieldworkers
- Sampling error / Non-sampling error
- Data collection error - Fieldworker error & Respondent error
- Intentional / Unintentional errors
- Non-response error and Response rate
- Reliability / Validity
- Coding / Coding / Mutually Exclusive and Collectively Exhaustive (MECE)
- Softwares to use
- Best hints

Thank you!



Generalitat de Catalunya
**Departament d'Empresa
i Treball**



**Cofinançat per
la Unió Europea**

Subvencionat pel Departament d'Empresa (**Programa
Primer**) i amb el cofinançament del Fons
Social Europeu Plus