

RESEARCH METHODOLOGY

PROJECT WORK-THESIS SUPPORTING MATERIAL



WHERE ARE WE NOW?

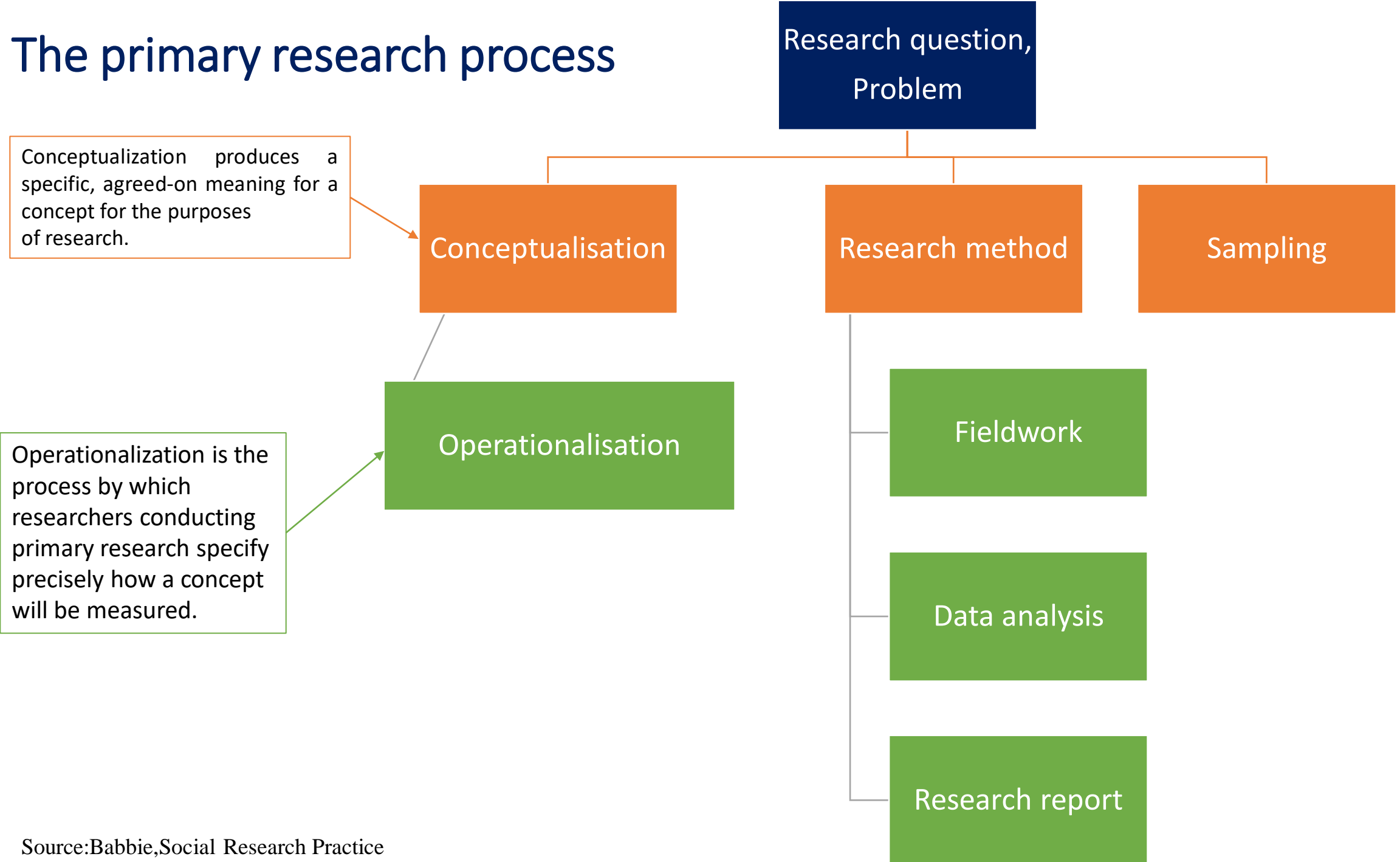
- Business problem definition
- Literature review, citation
- **Methodological issues**
- Data collection, analysis
- Presentation

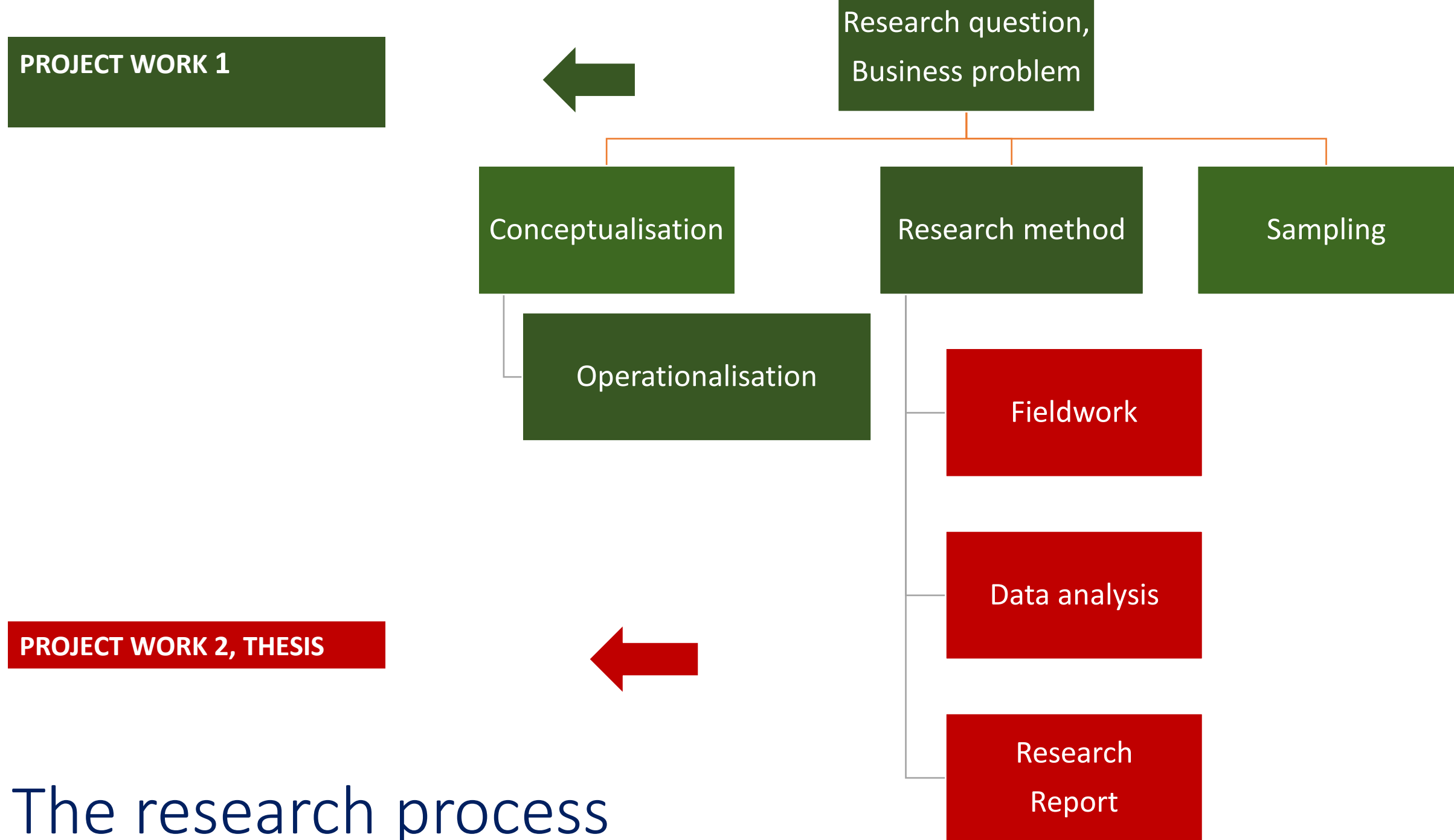


METHODOLOGICAL ISSUES

- **Business problem definition**
- **Secondary methods**
 - Selection and analysis of secondary methods
- **Primary methods**
 - Selection and analysis of primary methods
 - Survey
 - Focus group
 - Interview
 - Observation
 - Experiment

The primary research process





The research process

DEFINING THE BUSINESS PROBLEM

Identifying the business problem (research question)

- Idea, based on interest
- Presentation of the problem
- Purpose of the study, defining the objectives - what will the **recommendation cover**, what will the client get **in response** - what will be the **added value**
- Possibly hypothesising

This is one of the most important steps. The problem must be clearly defined.
The business problem determines the methodology to be chosen.

BUSINESS PROBLEM / RESEARCH QUESTION

Decision points:

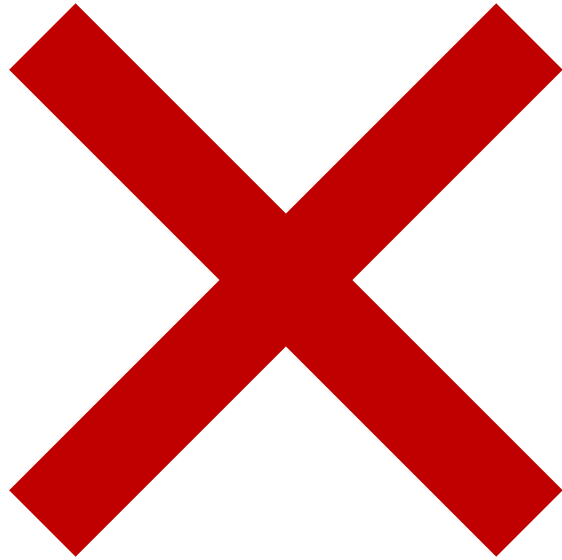
Isn't the formulation of the problem too general?

Is it well-founded, justified (not "out of the air"), based on pre-existing theories and facts?

Is there a relationship between the hypothesised variables, but a non-trivial relationship that is known to everyone?

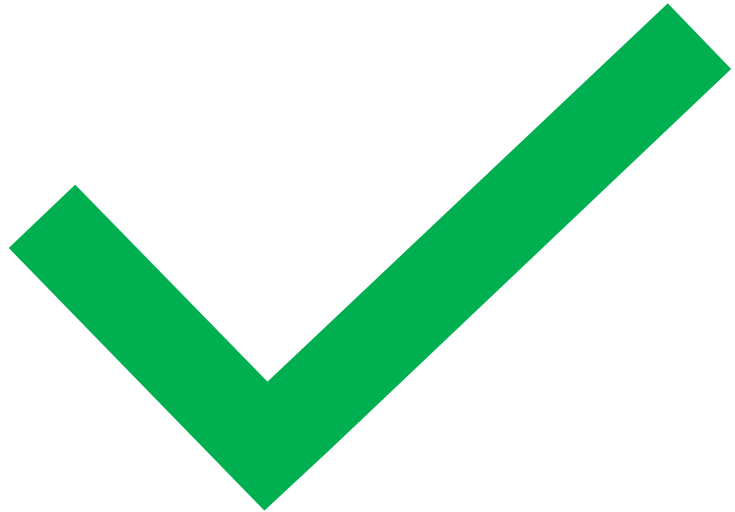
Is it worded clearly and precisely?

WRONG RESEARCH QUESTION



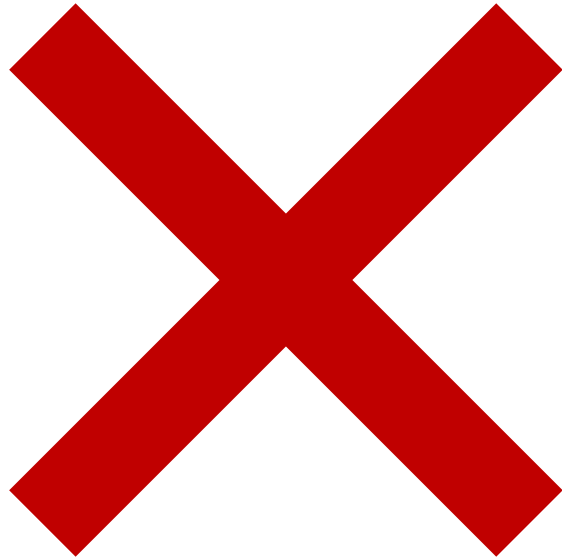
**To what extent has the
company's employer
branding activity
influenced the job
applications of potential
employees?**

BETTER RESEARCH QUESTION



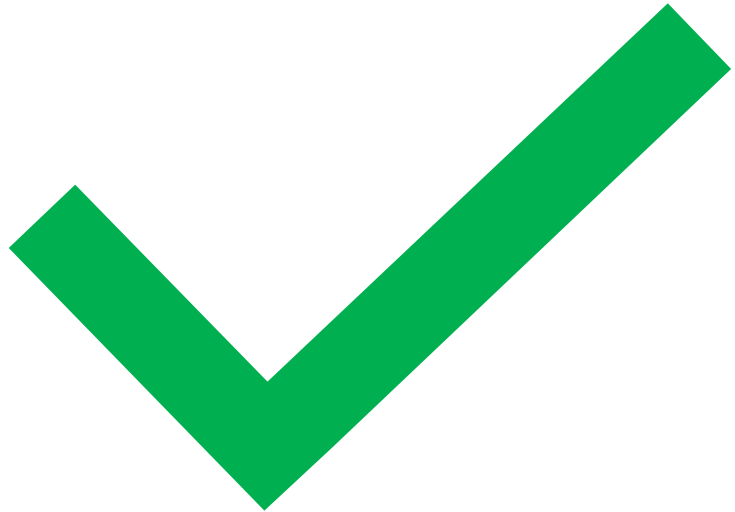
Topic - How to improve the integration process for new entrants/trainees/fresh graduates in a given company?

WRONG RESEARCH QUESTION



- **Analysis of marketing communications**
- **To what extent has the brand's marketing communication campaigns on’s social media platforms influenced consumer interest in electric cars?**

BETTER RESEARCH QUESTION



- **Analysis of marketing communications**
- **How do car owners aged 18-59 evaluate/perceive advertising for electric cars?**

RESEARCH QUESTION, HYPOTHESIS



The research question, hypotheses:

- Not too general, not too trivial
- Is it a „beating a dead horse” or too new?
- Is the target audience accessible?
- Can the topic be investigated?
- Do you have the appropriate literature?
- Can we answer the questions/hypotheses at the end of the research?
- How time-consuming is it?

BACKGROUND, LITERATURE

Identify background knowledge relevant to the research:

- **related** generally available data (CSO, OECD, EUROSTAT, legal background, corporate, business sources)
- the theories and concepts **behind your research question** (theoretical models, approaches, lessons learned in related subjects)
- **which theoretical approach and definition you are working with**
For example: loyalty concepts

**SECONDARY BACKGROUND, KNOWLEDGE, BACKGROUND
JUSTIFY THE CHOSEN METHODOLOGY AND DATA COLLECTION**

METHODOLOGICAL PART

The aim is to produce a good quality thesis

PRIMARY AND SECONDARY METHODS

- **Secondary data** is data that has already been collected for purposes other than the problem at hand. This data can be located quickly and inexpensively.
- **Primary data** is the information a company collects primarily to solve a specific business/research problem. The process of primary data collection is illustrated by the research process.

SECONDARY TO THE BACKGROUND INFORMATION,
PRIMARY RESEARCH ON THE BUSINESS PROBLEM

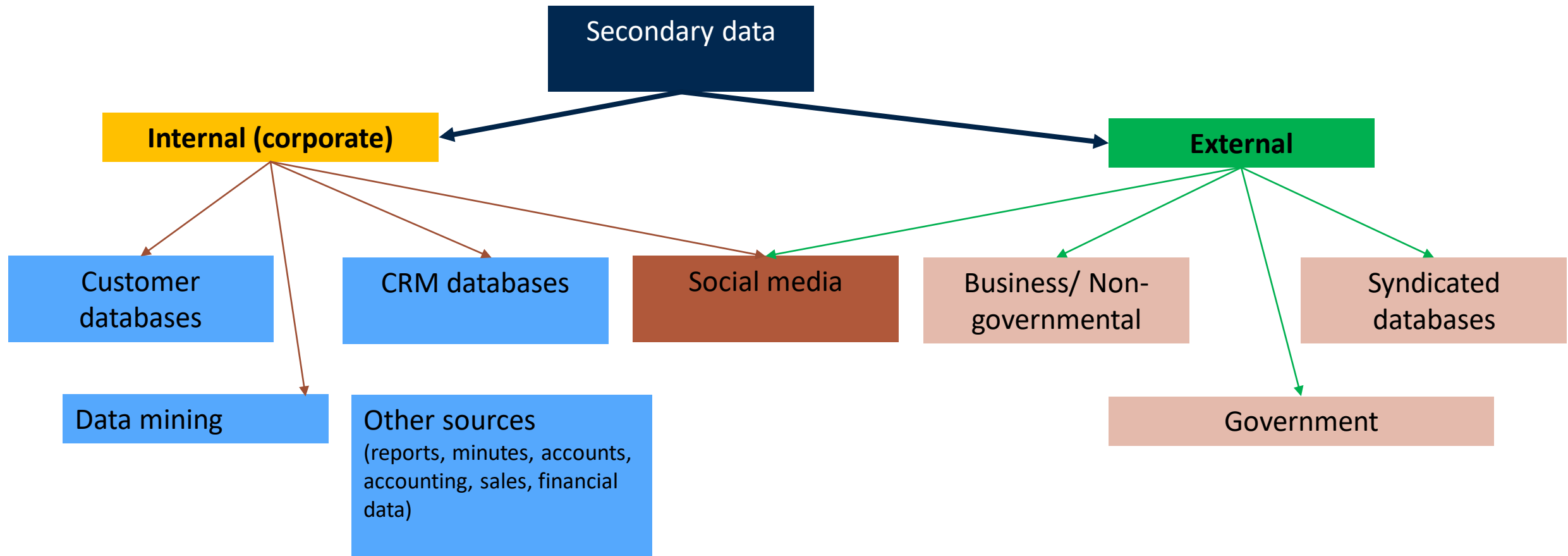
SELECTION AND ANALYSIS OF SECONDARY DATA

SECONDARY RESEARCH METHODS

CHARACTERISTICS

- Secondary data is **collected beforehand to solve another problem**, or may be recorded in the course of daily routine (e.g. reports, sales data, financial data, activities, complaints, other business documents).
- First analyse and review the secondary data, and then move to the primary method once the secondary sources have been processed.

SECONDARY RESEARCH METHODS



SECONDARY RESEARCH METHODS

CHARACTERISTICS

■ Advantages:

- Easy accessibility
- Databases can handle and make available topics and data sets that cannot be handled by primary methods

■ Disadvantages:

- Data can quickly become outdated
- Not all questions may be answered with the secondary information
- Not sure if we can filter out the relevant data for our purposes
- It may not be the same target group (e.g. if I am looking at 18-29 year olds, a study on a 50+ sample may not be relevant)

SELECTION OF SECONDARY RESEARCH METHODS

- **What should be considered when SELECTING SECONDARY DATA SOURCES?**
 - Data accuracy
 - The timeliness of the data, the purpose for which it was originally collected, the target group
 - Characteristics of key variables: categories, units of measurement, benchmarks, area, period data

SELECT THE DATA SOURCES THAT ARE MOST RELEVANT TO THE RESEARCH (JUSTIFY)

SECONDARY RESEARCH METHODS

ANALYSIS AND EVALUATION OF DATA

■ What to consider?

- Is the data you want to check available?
- Is the selected document credible, objective and reliable?
- How is the data processed? Qualitative or quantitative (see data collection, analysis)

SECONDARY RESEARCH METHODS

ANALYSIS AND EVALUATION

- **What will be the ADDED VALUE for secondary data (contribution)**
 - **When using already existing analyses (report, papers,..)**
 - ✓ *Presenting business processes in the context of a problem*
 - ✓ *Baseline, mapping and interpreting conditions*
 - ✓ *Analysis of results achieved so far, trends*
 - ✓ *Formulating hypotheses*
 - **Additional analysis based on secondary data**
 - ✓ *Analysis of raw information in corporate databases (e.g. financial, legal, management, sales, etc.)*

EXAMPLE

- **Case studies in accounting: the accounting side of the business process**
 - a description of the audit of a specific company,
 - introduction of a new cost and controlling system,
 - process of transition to IFRS reporting, etc.

A typical mistake: to describe only the process and not to make interpretations.

Added value: if there is an adequate and extensive literature review of the process, a professional evaluation of the case based on the literature and comparative analysis, as well as a presentation of the financial and non-financial impacts of the process.

SECONDARY RESEARCH METHODS

METHODOLOGICAL DESCRIPTION IN THE THESIS

The methodological section of the secondary research should describe and justify the selection criteria for each characteristic used:

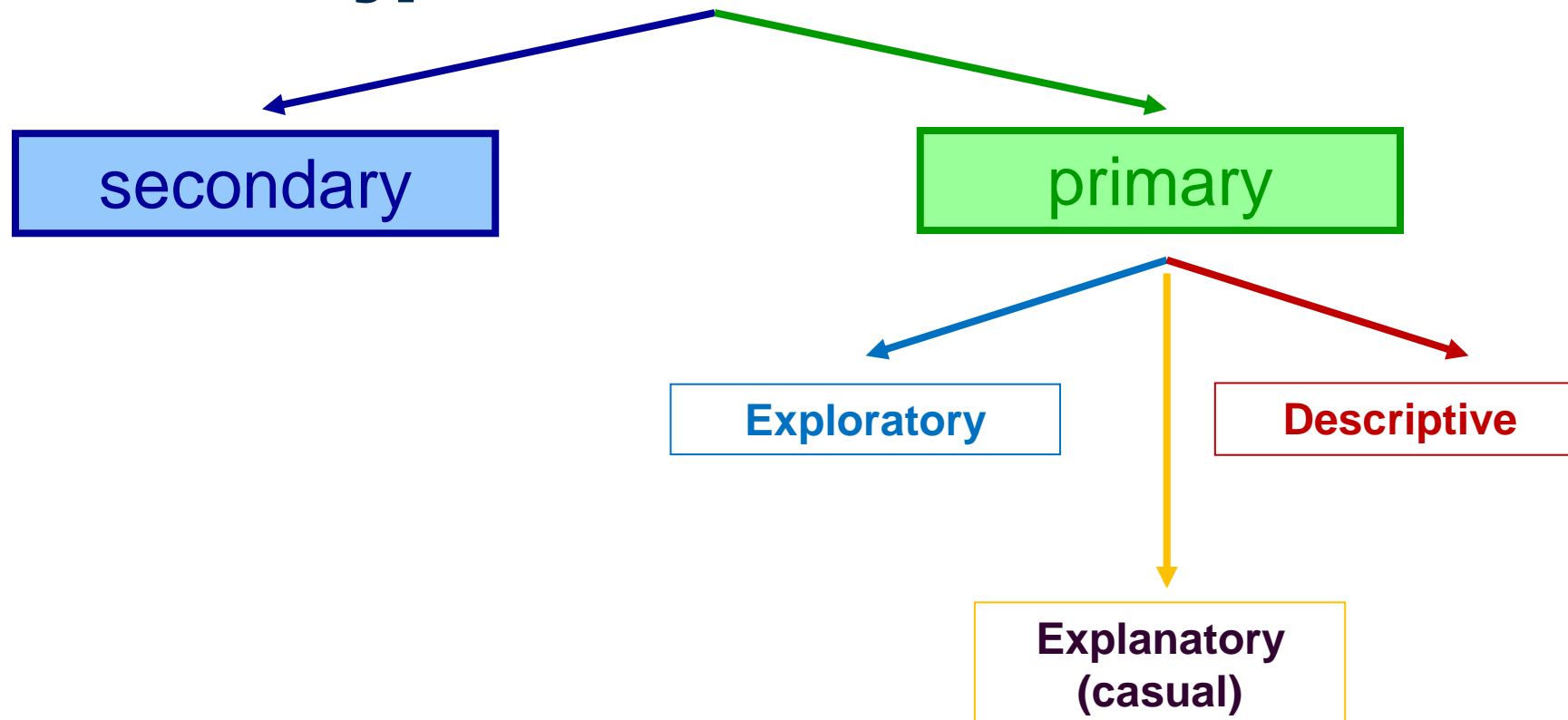
- SOURCES
- DATABASES
- VARIABLES
- SEGMENTATION CRITERIA
- MUTATORS
- RESULTS

SELECTION AND ANALYSIS OF PRIMARY DATA

PRIMARY RESEARCH METHODS

Based on the research objectives

Types of research data



PRIMARY RESEARCH METHODS

THE AIM OF THE RESEARCH DETERMINES THE METHOD

Exploratory - Exploratory research

- The objective is to gather preliminary information that will help define the problem and suggest hypotheses.
 - **qualitative techniques**

Descriptive - Descriptive research

- describes marketing problems, situations, or markets, such as the market potential for a product or the demographics and attitudes of consumers
 - **quantitative research** (e.g., survey, observation)

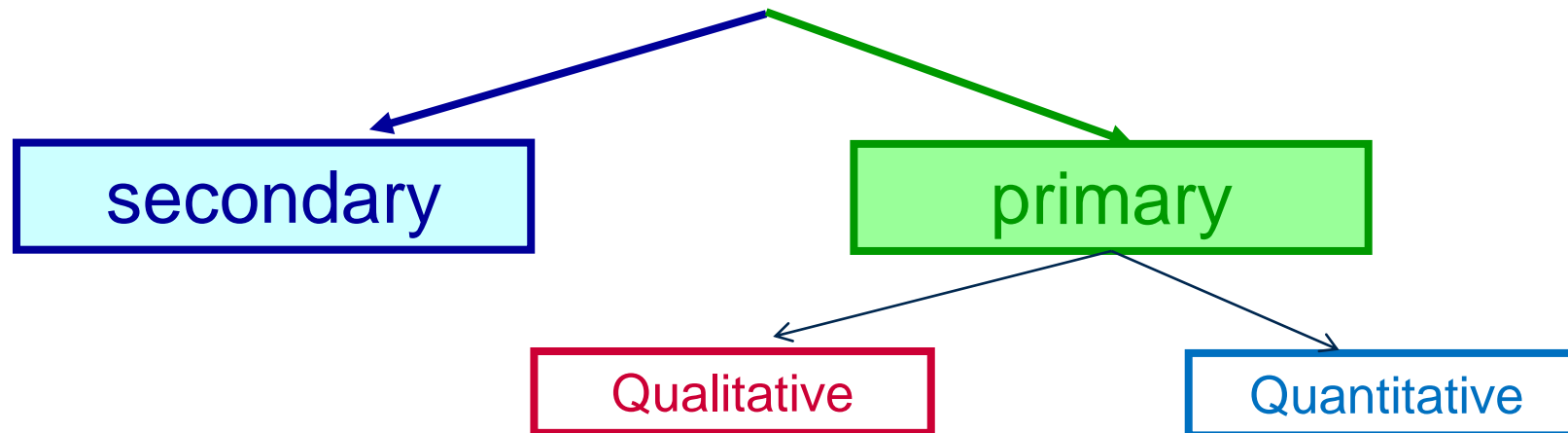
Explanatory (causal) - Explanatory (Casual) research

- tests hypothesis about cause-and-effect relationships
 - **Experiment**

PRIMARY RESEARCH METHODS

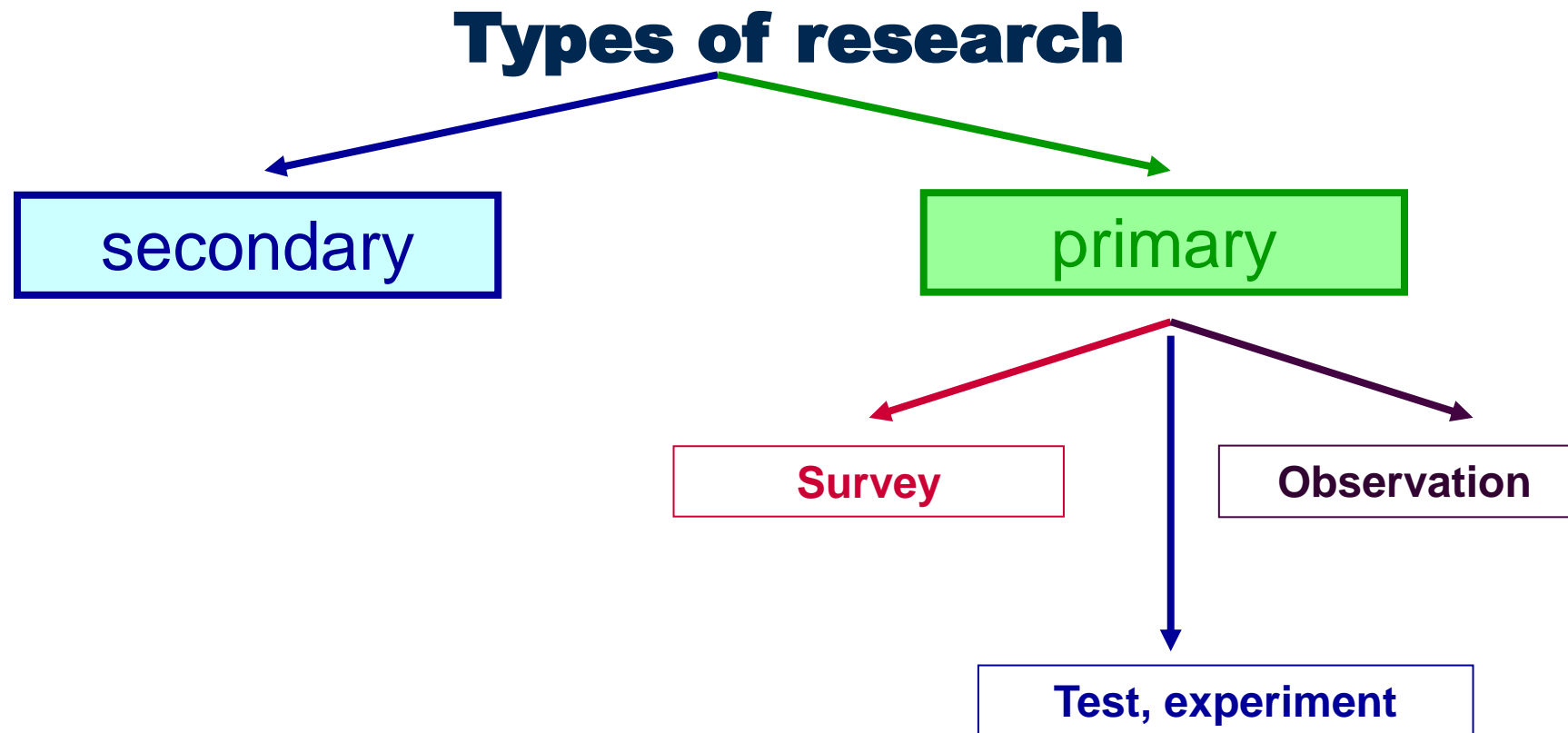
Based on data collection and analysis

Types of research data



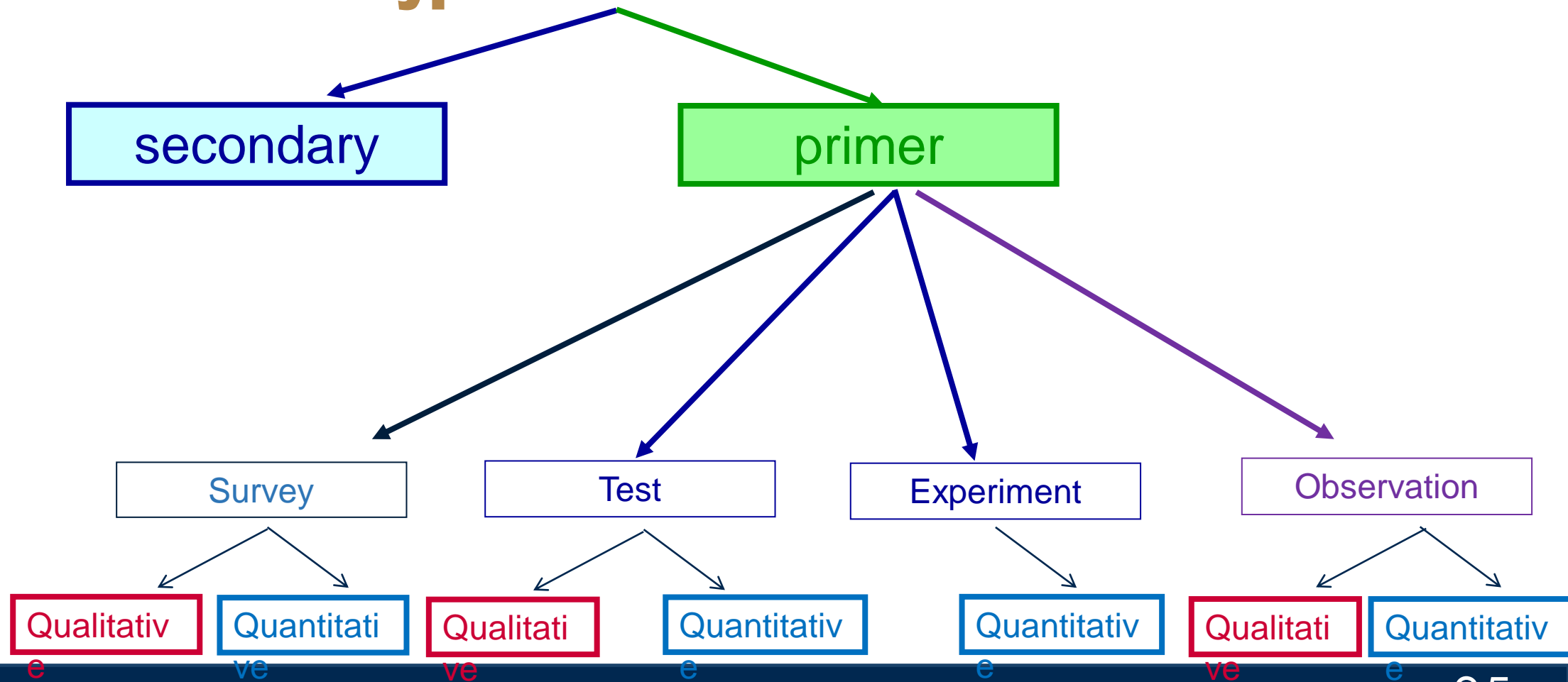
PRIMARY RESEARCH METHODS

Based on the data collection method



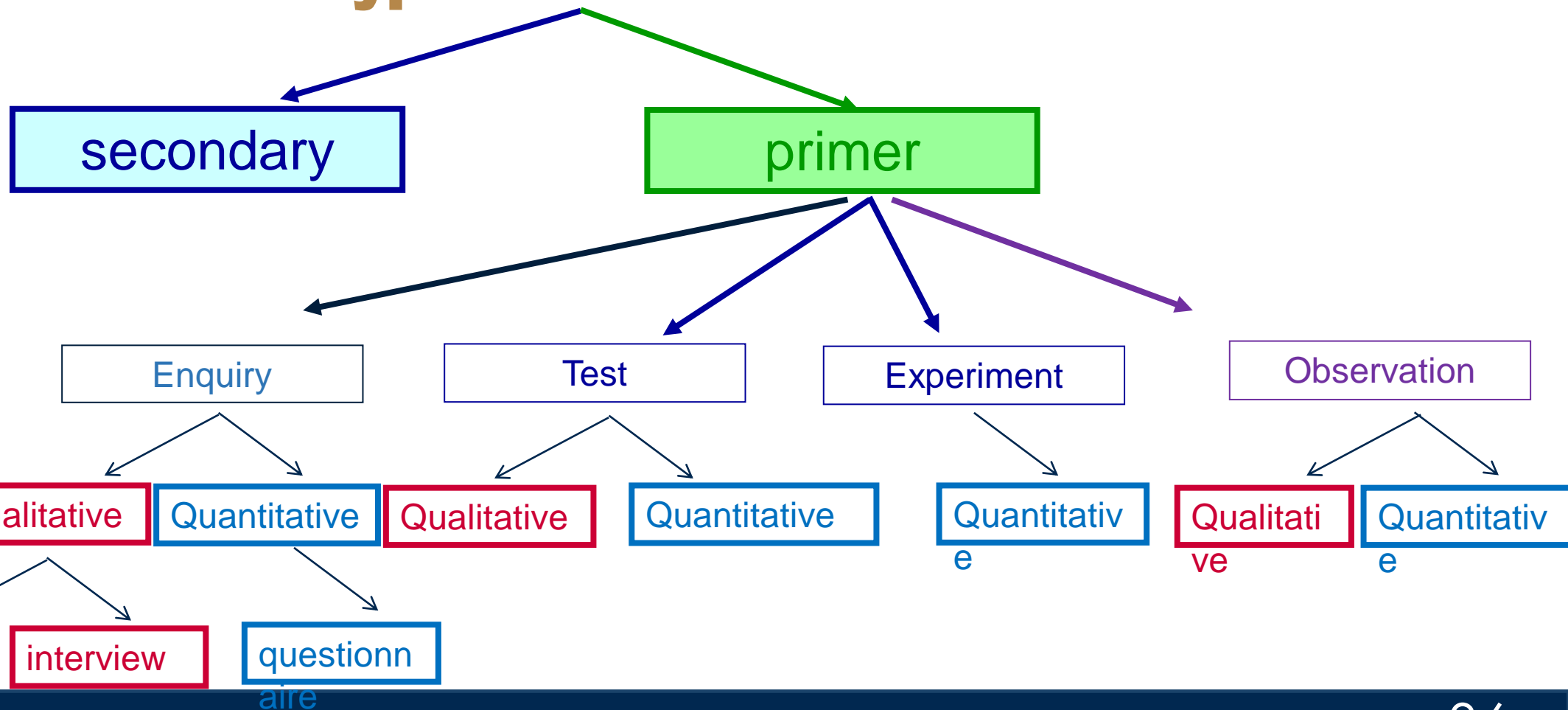
PRIMARY RESEARCH METHODS

Types of research



PRIMARY RESEARCH METHODS

Types of research



PRIMARY RESEARCH METHODS

METHODOLOGICAL SECTION IN THE THESIS

The method statement should include the following information:

- 1. Method of research/data collection (e.g. survey, face-to-face interview)**
- 2. Target group**
- 3. Sample size**
- 4. Sampling method**
- 5. Average duration of an interview/experiment/observation**
- 6. Date of data collection (fieldwork period)**

EXAMPLE METHODOLOGY- PRESENTATION

- **Method:** online survey
- **Target group:** 18 -29 year olds living in Budapest
- **Sample size:** n=302 persons
- **Sampling:** quota sampling (by gender and age group)
- **Length of questionnaire:** approx. 15-20 minutes
- **Data collection date:** February-March 2020

EXAMPLE METHODOLOGY- INTERPRETATION

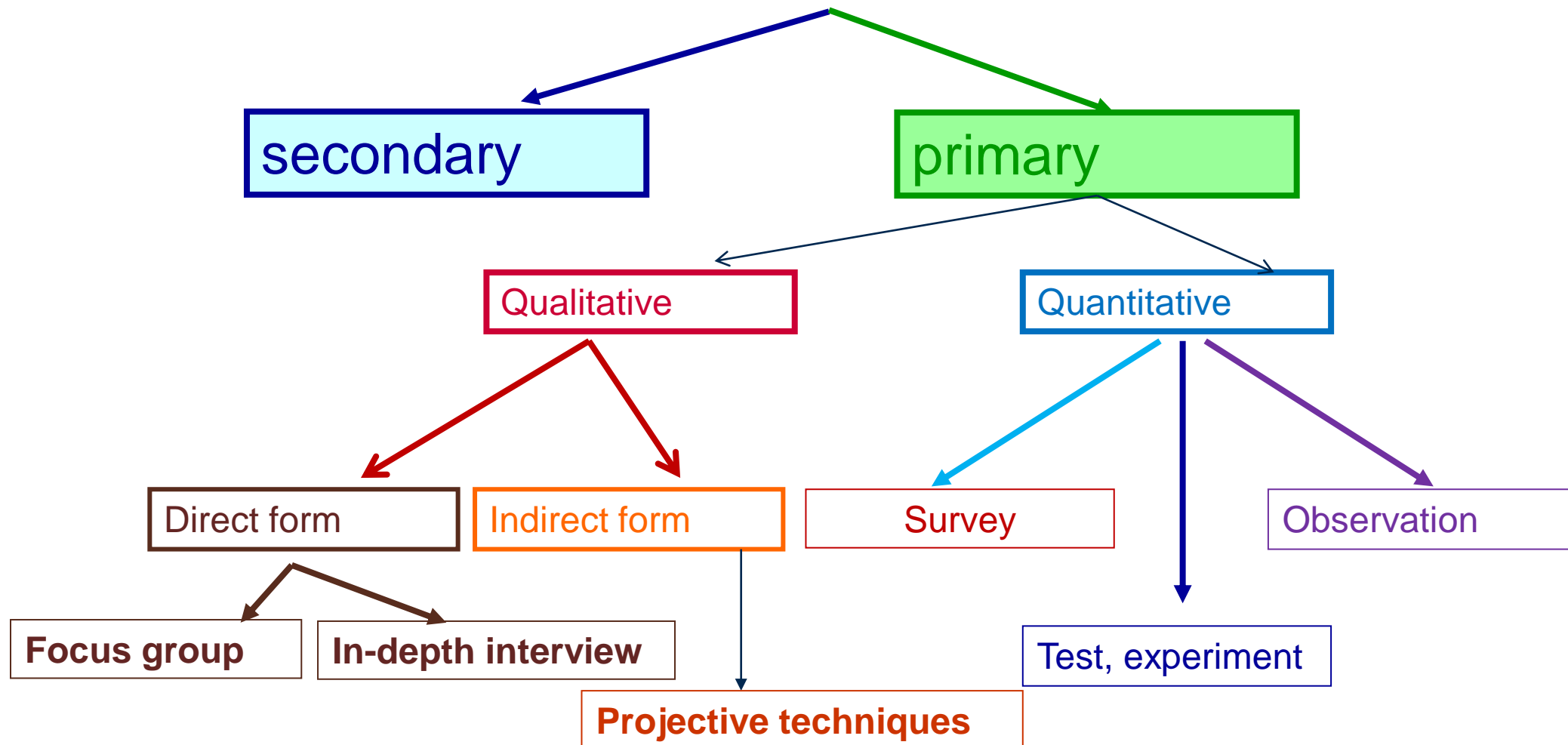
Written:

The primary research was conducted using an online questionnaire survey among 18-29-year-olds living in Budapest, with a quota sampling (by gender and age group). 380 people filled in the questionnaire, after deleting incomplete questionnaires the final sample size was 302 people. The questionnaire took on average 15-20 minutes to complete. The data collection took place between February and March 2020.

**JUSTIFY IN ADVANCE THE CRITERIA FOR THE CHOICE OF THE TARGET
GROUP, THE CHOICE OF THE METHOD**

PRIMARY METHODS CHARACTERISTICS AND PITFALLS

Types of empirical research data



PRIMARY RESEARCH METHODS

CHARACTERISTICS

1. Questionnaire survey (quantitative, interviewing)

- Typically to present attitudes, knowledge, opinions, expectations, experiences - customer/employee group, industry, product category...
- It is primarily descriptive, examining concepts such as satisfaction, loyalty, brand loyalty, preferences, quality. It can also involve comparing groups, or assessing trends.
 - Benefit: Properly designed and completed questionnaires provide relevant information
 - Disadvantage: Limited answer options
 - *"anyone can do a questionnaire"*

Serious methodological considerations are needed!

QUESTIONNAIRE SURVEY

STEPS AND PITFALLS

- **What do you want to answer with the questionnaire, data and results?**
 - What is the purpose of the research? What information do you need? These will determine the content and logic of the questions.
 - When formulating the questions, you need to know what kind of analysis you want to do - that's influences how to formulate the question.
 - Validity and reliability
- **What type of questionnaire will you use?**
 - Validated scales (sets of questions, questionnaire details) - used in previous research related to the research question
 - Other types of questions - checking validity and reliability

QUESTIONNAIRE SURVEY

STEPS AND PITFALLS

- **Use of scales - questionnaire survey**
 - Exploring attitudes, opinions, conditions
 - Use of indices to express e.g. satisfaction
 - Most often numerical scales, which express the respondent's judgement in numerical terms
 - ✓ *E.g. Likert scale, Stappel scale, JAR scale*

QUESTIONNAIRE SURVEY

STEPS AND PITFALLS

■ Questionnaire development

- Considering the characteristics of the target population - formulating questions
- Clear, unambiguous, short questions (avoid foreign words, complex sentences)
- Polite, neutral tone
- Ask one question at a time (no "and" or "or" in the question)
- Ask about things that the respondent can answer
- Do not exceed your expected knowledge
- Willingness to answer (sensitive questions)
- Avoid negative, suggestive questions, double statements

QUESTIONNAIRE SURVEY

STEPS AND PITFALLS

- **Questions by function:**
 - Main and supplementary questions
- **According to the answer options:**
 - Single-, multiple-choice closed questions
 - ✓ *Comprehensiveness principle: covering the full range of response options*
 - ✓ *Exclusivity principle: no overlap between the answer options*
 - ✓ *Selective questions (at least three options to choose from), dichotomous (two possible answers) questions + intermediate position*
 - Open questions
- **Questions by orientation:**
 - Indirect and direct questions

PRIMARY RESEARCH METHODS

CHARACTERISTICS

2. Interview (individual in-depth interview - qualitative)

It aims at a deeper understanding of attitudes, motivations, feelings, opinions and beliefs that influence human behaviour.

A detailed, in-depth exploration of the research area, but not with the aim of being representative.

- 1 interviewee, 1 hour
- 5-10-15 interviews
- Using groups of questions instead of a specific set of questions
- Use of projective techniques
- The role of the interviewer
- Writing a guide
- Special forms: pair/triad interview

PRIMARY RESEARCH METHODS

CHARACTERISTICS

3. Focus group research (qualitative)

It aims at a deeper understanding of attitudes, motivations, feelings, opinions, beliefs that influence human behaviour

A detailed, exhaustive exploration of the research area, but not the aim of representation

- 6-12 people, 1,5-2 hours
- Using groups of questions instead of a specific set of questions
- Group dynamic effects
- Role of the moderator
- Writing a script

FOCUS GROUP/INTERVIEW

STEPS AND PITFALLS

- What is the purpose of the research? What information do you need?
These will determine the content and logic of the questions.
- How will you ask questions?
 - Qualified interviewer (the moderator, interviewer)
 - Personal (e.g. focus lab, interviewee's home) - relaxed environment
- WHEN TO CHOOSE WHICH ONE?
 - **Interview** - hard to reach target group, experts, sensitive topic, little moderator experience, deeper knowledge per individual
 - **Focus group** - important group dynamics, easy to reach target group, more general topic

FOCUS GROUP/INTERVIEW

STEPS AND PITFALLS

- What type of guide will you use?
 - Open questions
 - Projective techniques
 - A framework built around the research questions

? "INTERVIEWING IS EASY" ?

Good quality interviewing requires thorough professional preparation

- **READ MORE: Malhotra: Marketing Research, Szokolszky: Research in Psychology**

FOCUS GROUP/INTERVIEW

STEPS AND PITFALLS

■ Analysis I.

- Qualitative analysis methods, content analysis
- Preparation of transcripts
- Exploring patterns, opinions
- Interviews should not be presented one by one
- Avoid quantification (it is forbidden to quantify)
- Anonymity (no names, use quota criteria)
- Describing the interviews, asking questions and presenting the answers is not the same as analysis

FOCUS GROUP/INTERVIEW

STEPS AND PITFALLS

■ Analysis II.

- We cannot generalise about the population, we cannot prove hypotheses with qualitative data
- Not used *instead of* quantitative research (because it seems easier)
- It can often be used to explore the business problem and its assumptions in depth, formulating hypotheses

PALACE METHODOLOGY

- **Method:** focus group
- **Target group:** 18 -29-year-olds living in Budapest
- **Sample size:** 4 groups, 6 persons per group
- **Sampling:** convenience sampling
- **Focus group length:** approx. 120 minutes
- **Data collection date:** February-March 2020

PRIMARY RESEARCH METHODS

CHARACTERISTICS

4. Observation (qualitative or quantitative)

It aims to observe human behaviour, in laboratory or real-life conditions

Types: mystery shopping, ethnography, netnography, eye-tracking, data mining

- Precise definition of the observation criteria
- Observation scenario, use of follow-up questionnaire typical
- It is important for observers to define exactly what is to be observed (training, monitoring)

PRIMARY RESEARCH METHODS

5. Experiment (quantitative)

Explore causal links between variables - whether or not an outcome achieved can be attributed to a particular intervention

E.g. impact of the training programme, impact of process improvement interventions, impact of tools used

CHARACTERISTICS

- How a procedure works
- Proving the effectiveness of interventions

A control group may be considered to prove that the variable under investigation is responsible for the result.

RARELY USED

PRIMARY RESEARCH METHODS

CHARACTERISTICS

6. Test (quantitative or qualitative)

It aims to observe human behaviour, in laboratory or real-life conditions

Types: product testing, price testing, advertising testing, target market testing

- Blank test x branded test
- Where? (at home - in-hall)
- Types:
 - Monadic (1 consumer 1 product)
 - Sequentially narrative (1 product at a time, but several products in total)
 - Round robin (randomly selected product)
 - Comparative product test

RARELY USED

PRIMARY RESEARCH METHODS

CHARACTERISTICS

Case study

- Analysis of a limited number of events
- Usually describes a series of events – typically with the following components: circumstances, stakeholders, events, problems, conflicts
- Application: for example, analysing a specific business/research problem across one or more companies
- Sources can be **primary** (e.g. interviews with company managers) **and/or secondary** (analysis of company financial, accounting data)
- **Benefit:** Helps to understand a problem in depth through a specific case - can be used to formulate hypotheses
- **Cons:** The results are not generalisable to the whole industry

CASE STUDY

STEPS AND PITFALLS

Its steps and methodology should be included in the:

- **Research question definition**
- **Selection of cases: one or more cases**
- **Choice of data collection and analysis techniques**
- **Data collection preparation and researcher reflection (subjectivity)**
- **Data collection**
- **Data analysis and interpretation**
- **Preparing research reports**
- **Definition of quality criteria**

QUALITATIVE RESEARCH

Use what you have learned in related subjects:

- **Marketing research**

ADDITIONAL RESOURCES:

- **Babbie: Social research methodology**
- **Malhotra: Marketing research**

QUANTITATIVE RESEARCH

Use what you have learned in related subjects:

- Business Statistics

- Econometrics
- Marketing research