



UNIVERSITÀ  
DEGLI STUDI  
DI BERGAMO

Dipartimento  
di Scienze Aziendali

CREO

Competencies and  
Resources for  
Entrepreneurial  
Orientation

# CREO-LAB

## SALUTE

*Come validare i bisogni (metodologie quantitative e qualitative)*

Speaker

Prof. Federico Mangiò

Room

Bergamo Science Center

Date

5 April 2024 [2.00-6.00 pm]

# Agenda

- Needs validation, Competitor Analysis, Market Research
- Qual vs Quant Methodologies
- Desk vs Field Market Research
- Desk research with external secondary data
- Field research through qual & quant methods

- Discuss applications for the field projects
- Design the Analysis



# Needs validation, Competitor analysis, Market Research

- **Needs validation:** corroborate, contextualize, and measure the identified need and (pre) test the feasibility of the proposed solution
- **Competitor (stakeholder) analysis:** know enough about a competitor (stakeholder) to be able to strategize by taking into account the competitors' actions and responses
- Both needs validation and competitor (stakeholder) analyses are done *through* **market research!**



# Market Research

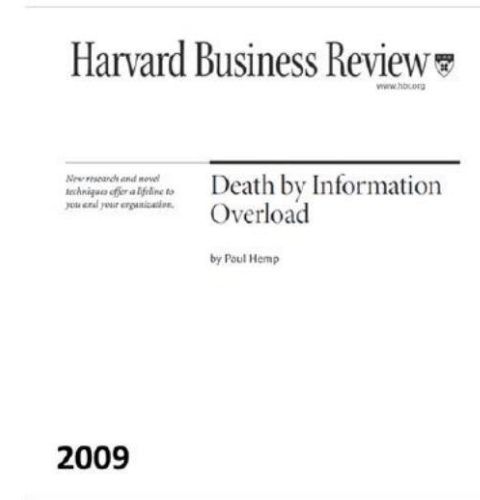
## Research, more than just a collection of data!

Research means that:

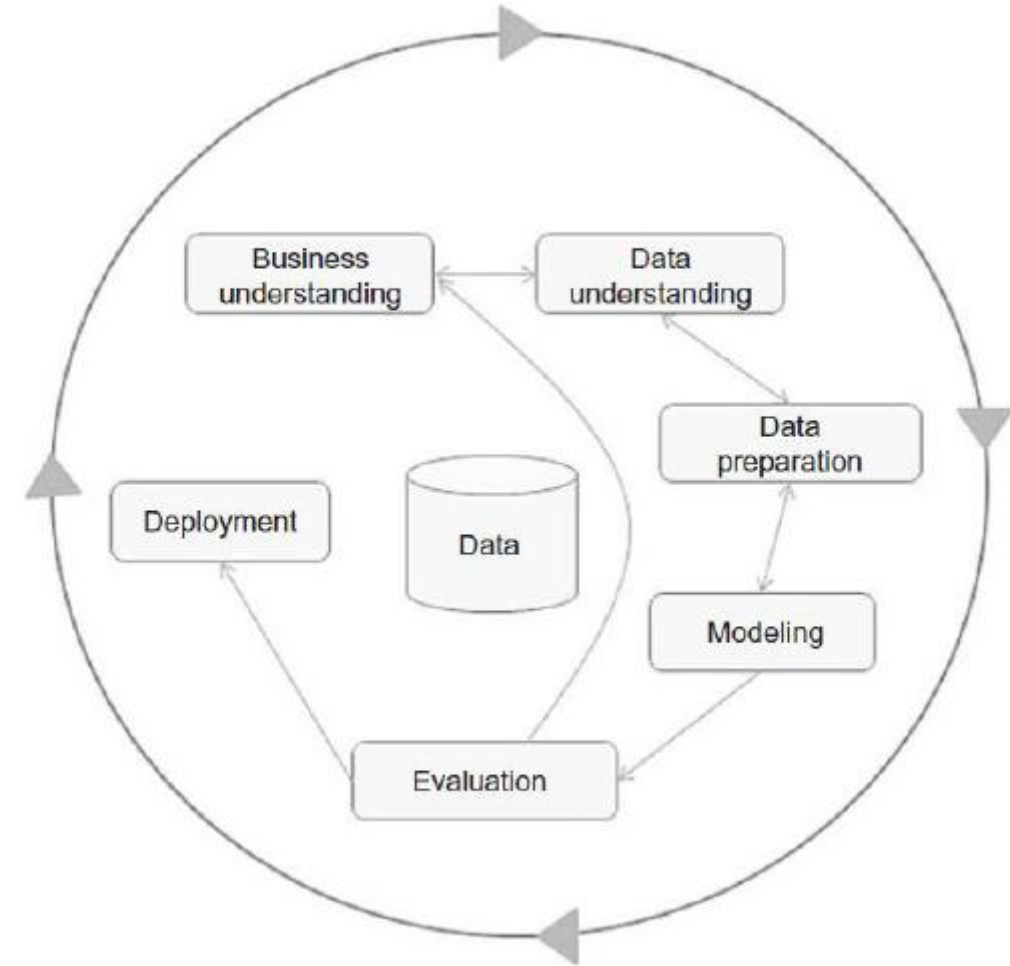
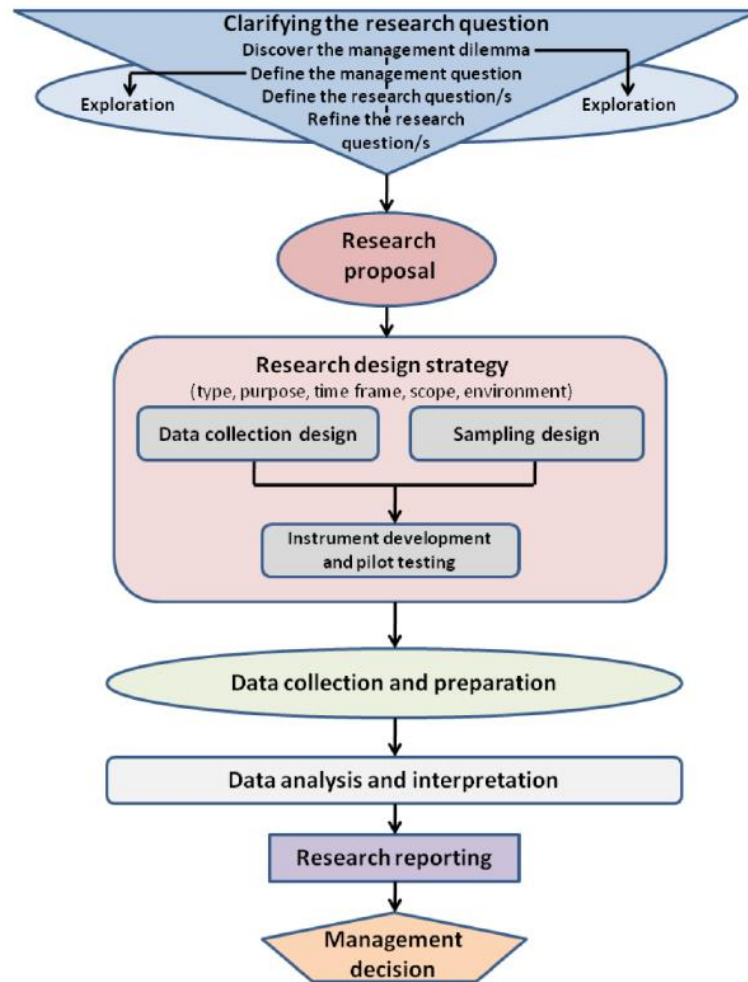
- Data are collected systematically.
- Data are interpreted systematically.
- There is a clear purpose: to find things out.

We can therefore define **research** as something that people undertake in order to find out things in a systematic way, thereby increasing their knowledge.

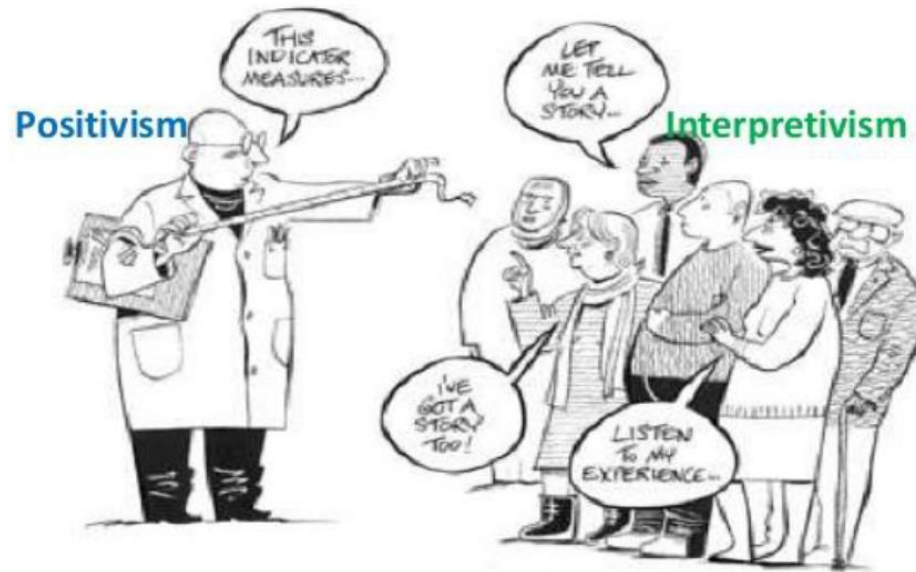
([Thornill et al. 2009](#))



# The process of (applied) research



# Qual vs Quant



## Positivism

### *Basic principles*

View of the world	The world is external and objective
Involvement of researcher	Researcher is independent
Researcher's influence	Research is value-free

### *Assumptions*

What is observed?	Objective, often quantitative, facts
How is knowledge developed?	Reducing phenomena to simple elements representing general laws

## Interpretivism

The world is socially constructed and subjective
Researcher is part of what is observed and sometimes even actively collaborates
Research is driven by human interest

Subjective interpretations of meanings
Taking a broad and total view of phenomena to detect explanations beyond the current knowledge

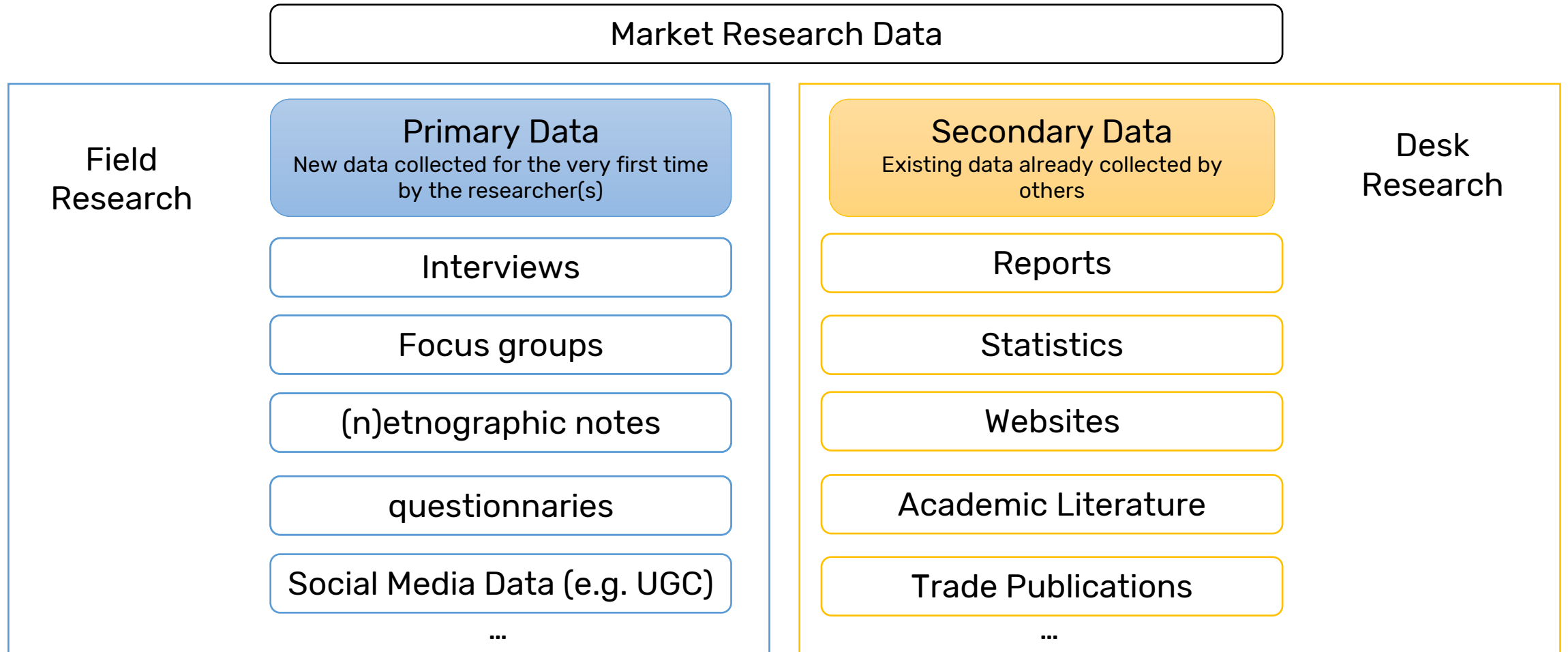
[Cooper et al. \(2014\)](#)



# Qual vs Quant



# Field vs Desk Market Research





# Desk research via external secondary data



# External Secondary Data Sources

- **Grey literature:** every “knowledge artifact” not scrutinized by (double blind) peer review process (Lawrence et al 2014). Characterized by various levels of authorship’s expertise and publishers’ control (Adams et al 2017)
- **White literature:** academic publications, peer-reviewed



# Desk Analysis: sources (1)

## Online Archival Resources for corporate data

- **AIDA & Zephir**– *AIDA (Analisi Informatizzata delle Aziende Italiane)* contains **financial, personal and commercial information** on more than one million Italian companies (Ilt, joint-stock, SMEs & others). *Zephir* contains comprehensive **M&A** data with detailed company information.
- **Crunchbase** is a private platform for researching corporate information on private and public companies globally

The screenshot shows the AIDA website interface. At the top, there is a navigation bar with tabs for 'Società', 'Contatti', 'Rapporti settoriali', 'Bilanci ottici', and 'byo value'. Below this is a search bar with the placeholder text 'Ragione sociale o Codice Identificativo'. The main content area features a 'Home' section with various search and filter options, including 'Ricerca', 'Ricerche salvate', 'Preferiti', and 'Cronologia'. A list of categories is displayed, such as 'Ragione sociale', 'Numeri identificativi', 'Situazione giuridica', 'Forma giuridica', 'Data di costituzione', 'Anagrafica', 'Area geografica', 'Attività', 'Esponenti', 'Revisori e sindaci', and 'Azionariato e partecipazioni'. A checkbox for 'Imposta come home page' is visible at the bottom of the main content area.

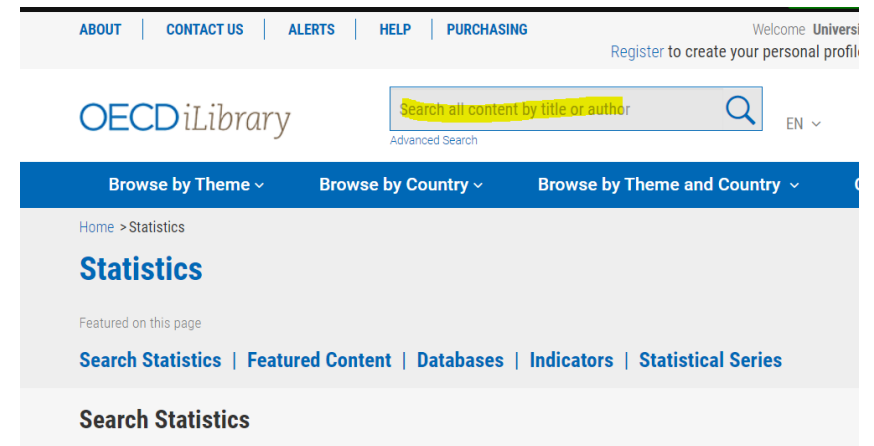
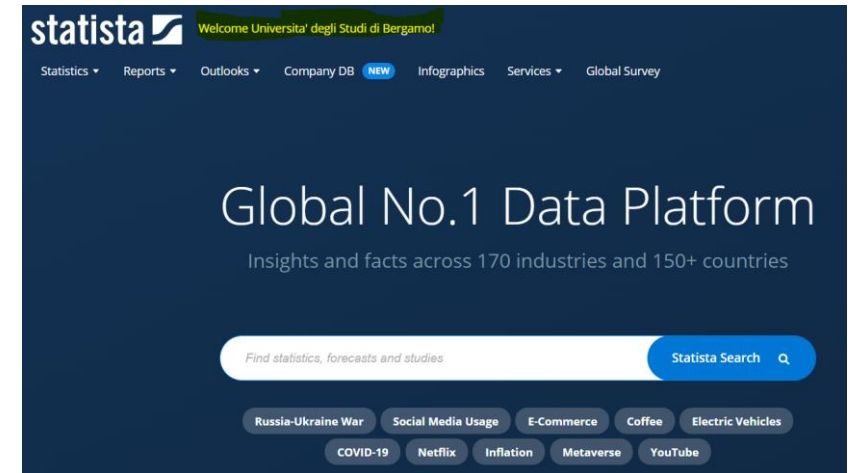
The screenshot shows the Zephyr website interface. At the top, there is a navigation bar with tabs for 'M&A deals', 'News', and 'Royalty agreements'. The main content area features a 'ZEPHYR EDITORIAL NEWS' section with a list of news items, including 'CI Financial taking over Doyle Wealth Management', 'Garlyle picks up stake in Manna Pro', and 'Lone Star is weighing options for Stark Group'. Below the news section, there are three main content blocks: 'ZEPHYR' with 'User default and wizard options', 'ZEPHYR ADVANCED' with 'For advanced queries and analysis', and 'ZEPHYR M&A REPORTS' with 'Service not available'. A 'Biggest Deals - Last week' section is also visible at the bottom right.



# Desk Analysis: sources (2)

## Online Archival Resources for industry data





- **Statista** is a great platform that gives you access to statistics, forecasts, dossiers, reports and infographics from thousands of sources. Combine economic and consumption data, opinion polls and demographic trends. NB: *aggregator!*
- **OECD iLibrary** provides access to all contents published by the OECD (Organization for Economic Cooperation and Development): statistics, books, papers and serials

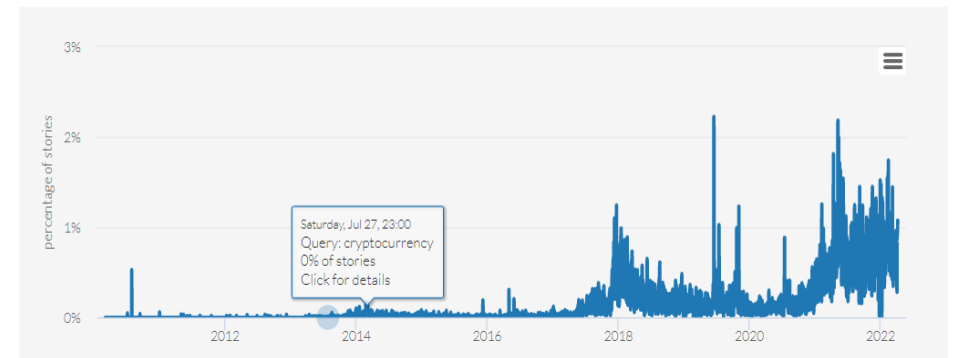


# Desk Analysis: sources (3)

## Online Archival Resources for Press Coverage

- [Nexis Uni](#) (former Lexis Nexis): academic database containing various textual sources ranging from patents to academic outlets and press newspapers.
- [Mediacloud.org](#): alternative to Nexis Uni, open-source news media database developed by Harvard's Berkman Klein Center for Internet & Society and the Center for Civic Media at the MIT Media Lab for studying media ecosystems tracking millions of stories published online.

Title	Media Source	Published	
If You Hold Crypto For Someone Else, Can IRS Collect Taxes From You?	 Forbes	4/5/2022	<a href="#">INFO</a>
<a href="#">Bitcoin Flat, Dogecoin Down, Ethereum Edges Up — Is The Crypto Rally Running Out Of Steam...</a>	 Benzinga	3/29/2022	<a href="#">INFO</a>
Yes, You Can Invest In Real Estate With Your IRA Or 401(k)	 Forbes	3/30/2022	<a href="#">INFO</a>
Nexo Launches \$150 Million Fund To Invest In Web3	 IBTimes	3/24/2022	<a href="#">INFO</a>



# Desk Analysis: sources (4)

## Online Archival Resources for Academic Literature

1. [Google Scholar](#) citation browser owned by Alphabet
2. [Scopus](#) global citation dataset founded by Elsevier
3. [Web of Science](#) global publisher-independent citation dataset owned by Clarivate Analytics

→ **Mind the use of keywords!!** (Boolean functions and “search tips”)



# Desk Analysis: sources (4)

## Collection methods for online data

- 1. Application Programming Interfaces (APIs):** “a set of rules that allows programmers to develop software for a particular operating system without having to be completely familiar with that operating system” (Merriam-Webster 2021)
  - *Communalytic* ([Reddit](#)):
  - *Digital Methods Initiative* ([YouTube Data Tools](#))
- 2. Scraping:** “to build a chain from the relatively unformed mass of online data to formatted information, and along this chain relatively raw textual data is progressively stripped of its useless elements and formatted so as to produce a well-ordered, useable data set” (Merres & Walterverde 2013).
  - [Apify](#)
  - [Webscraper.io](#)
- 3. Content Marketing and Brand Monitoring platforms:** Easy-to-use content marketing platforms which crawl millions of websites and SNS to offer marketing intelligence inputs for brand monitoring, alerting, and influencer marketing. Functions: content strategy and influencer marketing.
  - [Buzzsumo](#) (30-day free trial):
  - [Keyhole](#) (limited functionalities)
- 4. Online Archives :** online repositories, open-access or walled, containing secondary data collected by other researchers, companies, or institutions.



# How to evaluate secondary data

- The **source** of secondary data
- The data provider's **purpose**
- The **data collector**
- **When** the data was collected
- **How** the data was collected
- **What** data was collected
- Does this data **relate** to **other** data?



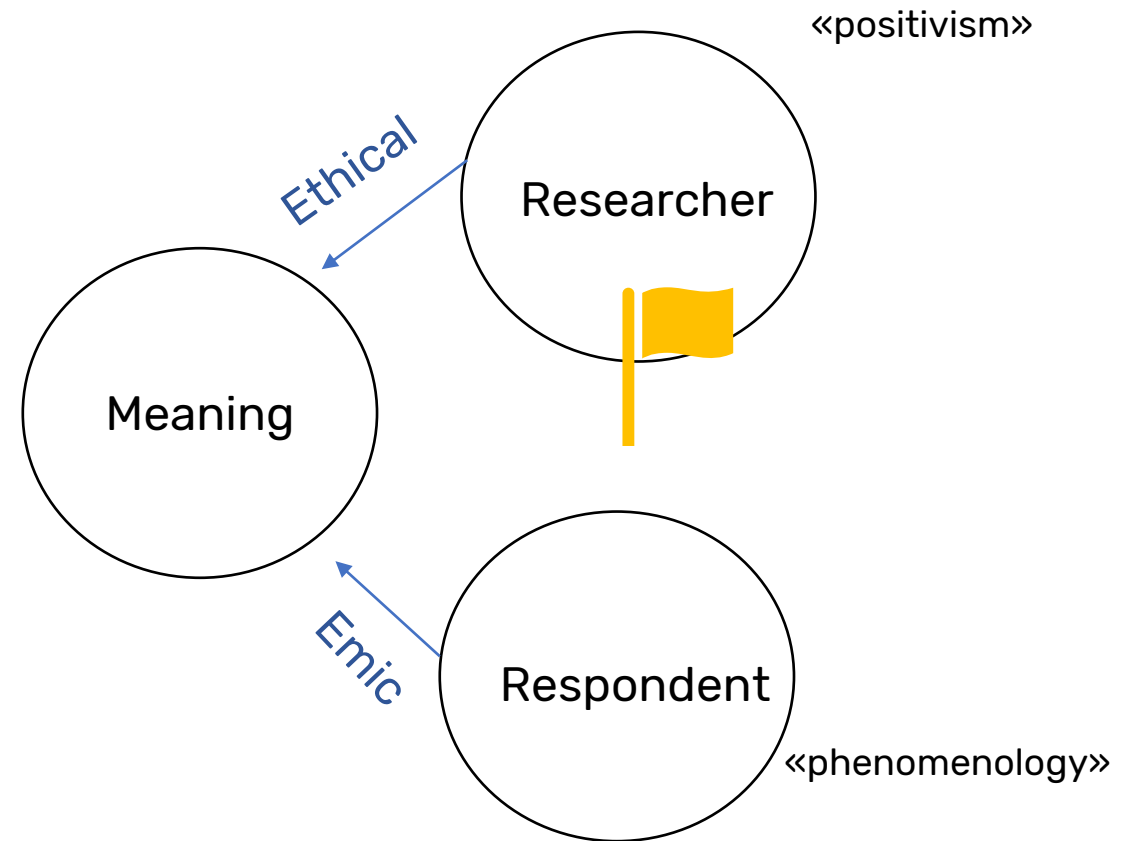


# Field research via *qualitative* methodologies



# The role of researcher in qual methodologies

1. The *researcher* is the research tool
2. Subjectivity is objectivity
3. Naturalization: getting immersed and involved
4. “Drive” whenever necessary



# 1. Structured Interview

It is *not*:

- **A questionnaire/survey**
- **a list of questions**
- **Police interrogation**

Advantages:

- Helps the interviewer to remember the points to cover
- Suggest ways of approaching topics
- Reminds the interviewer about probes and ways of asking questions
- Includes an introduction and ways of ending interview
- Ensure that the interviewer covers all the topics
- Gives a possible order of topics
- Helps the interviewer enable people to talk in their own way and as fully as possible



# Best Interviewing Practices (1)

## Interview Guide (example)

1. I understand that you are passionate about local art. Tell me about this passion of yours.
2. What motivated you to learn about local art?
3. Tell me, in details, about the kinds of things you have done to learn more about local art. (What did you do first?)
4. Where do you find information about local art?
5. Tell me about someone who played an important role in your relationship towards local art.
6. Tell me about a time when something you learned about local art had a positive impact on your life.
7. What kinds of challenges do you face when you want to experience local art?
8. Is there anything you would like to share about this topic that we did not discuss yet?

Source: adapted from Merriam & Tisdell (2016:126)



# Best Interviewing Practices (2)

## ***Pre-Interview***

- Develop the Guide
  - Develop an appropriate interview guide
  - Word questions to mitigate response bias (avoid whys!)
  - Sequence questions to mitigate response bias
- Scheduling interviews
  - Ask respondents to schedule interviews
  - Send interview to interviewees ahead of time
  - Confirm interview the day before
  - Ask for consent to record

## ***During Interview***

- Interview in groups
- At beginning of interview explain objective
- Be sensitive and share positive impact
- Be an active and responsive (reflective) listener
- Don't accept "I don't know" responses...probe!
- Keep the interview on track, based on the interview guide
- At the end of the interview, ask for additional comments

## ***Post Interview***

- Transcribe notes into report
- Send report to interviewee for feedback/affirmation
- Follow up with a thank you to all interviewees
- After feedback, document results
- Tabulate and write a key findings summary



## 2. Focus Group

An event where you invite a group of people to discuss a topic **interactively**. Used in market research to generate ideas, test concepts, and map attitudes and opinions

It is *not*:

- *Group interview* (i.e., interviewing a number of people at the same time, the emphasis being on questions and responses between the researcher and participants [Gibbs 1997])

Advantages:

- Your own role is lessened –you are more a facilitator than the interviewer
- Elicit a multiplicity of views and emotional processes within a group context
- Interaction enables participants to ask questions to each other and re-evaluate and reconsider their own understandings of their specific experiences
- Enables to gain a larger amount of information in a shorter period of time



# Best Focus Group Practices

## **Pre-FG**

- Same to structured interviews, plus:
- Usually 4-8 people per group
- Depending on the topic you might want to make your group as much homogenous as possible (same age, same gender etc.)

## **During FG**

- *Conduct FG in group: 1 moderator + assistants (recoding and taking notes)*
- Explain purpose, encourage participants to relax, and to initiate their comments and detailed discussion.
- *Guide the conversation but do not disturb the conversation flow*
- *Elicit the conversation with stimuli*

## **Post FG**

- Same to structured interviews



# Field research via quant methods





# Questionnaire ('survey')

*It is :*

- A list of questions each with a range of answers
- format that enables standardized, **structured**, data to be gathered about each of a usual large number of cases

*It is not:*

- A written interview!



# Pros & Cons

## Advantages:

- Broad scope
- Answers the questions of what, how many, how much, how, and why
- Ability to observe a phenomena in a natural setting
- Ability to control variables
- Respondents may be more honest in their responses because of the anonymous nature
- **Low marginal costs** (reusable)
- Easy to administer, score, and code
- **High external validity**
- **Accurate results due to the large sample size**
- Method to test theoretical propositions objectively
- Confirms and quantifies the findings of qualitative research

## Disadvantages:

- **Provides little depth and understanding of the context and history of a phenomena**
- Can **only provide a snapshot** of behavior at one place and time
- Structure of questionnaires may cause people to poorly represent their opinion Or subjects may elicit no response on some questions
- Results may differ if using the same questionnaire in a different context or culture
- **Cannot prove causal relationships**
- High administrative costs to set-up and score
- Typically low response rates



# Type of Q&As

## Types of Questions:

- **How Many / Much/Often** → attention to the ranges and try to use tables if you have multiple questions
- **Chosen from a list** → there is a set of fixed answers the respondent has to choose from
- **Agree/Disagree** → used for people's idea, values and thoughts, for this reason we have to be very careful → In this case we use statements
- ~~**Dichotomous** (Yes/No) It is better to add «don't know» or «not applicable»~~



# Most frequent errors

The way the questions are worded or the way the questionnaire is formatted may affect how an individual responds to the survey.

For this reason, we have to pay attention to the following errors:

- 1. Specification problems**
- 2. Question wording**
- 3. Length of the questions**
- 4. Length of the questionnaire**
- 5. Order of questions**
- 6. Response categories**
- 7. Questionnaire format**
- 8. Interviewer errors**

→ PRE -TEST!!!



# Design the Analysis



# Designing the “Fact-Based” Analysis

## Work Planning

- You can't always do an exhaustive analysis
- Focus on the factors that most affect the problem
- Don't lose sight of the big picture, or try to “boil the ocean”
- Only do analysis necessary to prove or disprove hypothesis
- Sometimes it takes the analysis to develop the hypothesis



# Speeding up the Analysis Process

## **Let your 'hypotheses' drive your analysis**

- A properly designed issue tree will focus your analysis

## **Get your analytical priorities straight**

- do what's relevant, not what's interesting

## **Forget about absolute precision**

- You don't need to hit a home run, just be in the ball park

## **Triangulate around the tough problems**

- Use known data points to scope the direction & magnitude



# Develop the Work Plan

Using a spreadsheet, document the work plan. Following at the columns (from left to right, next slide):

1. Write your initial **assumptions** and key sub issue **question(s)**
2. List the data necessary for the **Analysis**
3. List the specific **Data Sources** for each analysis
4. List brief descriptions of the **Expected Output**
5. List the people **Responsible** for each analysis
6. List the **Due Dates** for each end product





# Work Plan Spreadsheet

Issue/Hypo	Analysis	Data Source	Expected Output	Responsible	Due Date
Is accessibility for elderly citizens a local issue <b>Yes</b>	(Social) Media analysis	SMP, newspaper articles	Chart	Luca	4/21/23
Other players are providing this service <b>No</b>	Competitors' value proposition analysis	Corporate websites; industry reports	Product-feature matrix	Michael	4/28/23



# Other Work Plan Considerations

- When developing the work plan analyses, prioritize them in a logical sequential order
- Results from higher priority (dominant) analyses can render lower priority analyses unnecessary
- Sometimes the time available won't allow for a sequenced and staggered analyses

