Market Research

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[Workshop]

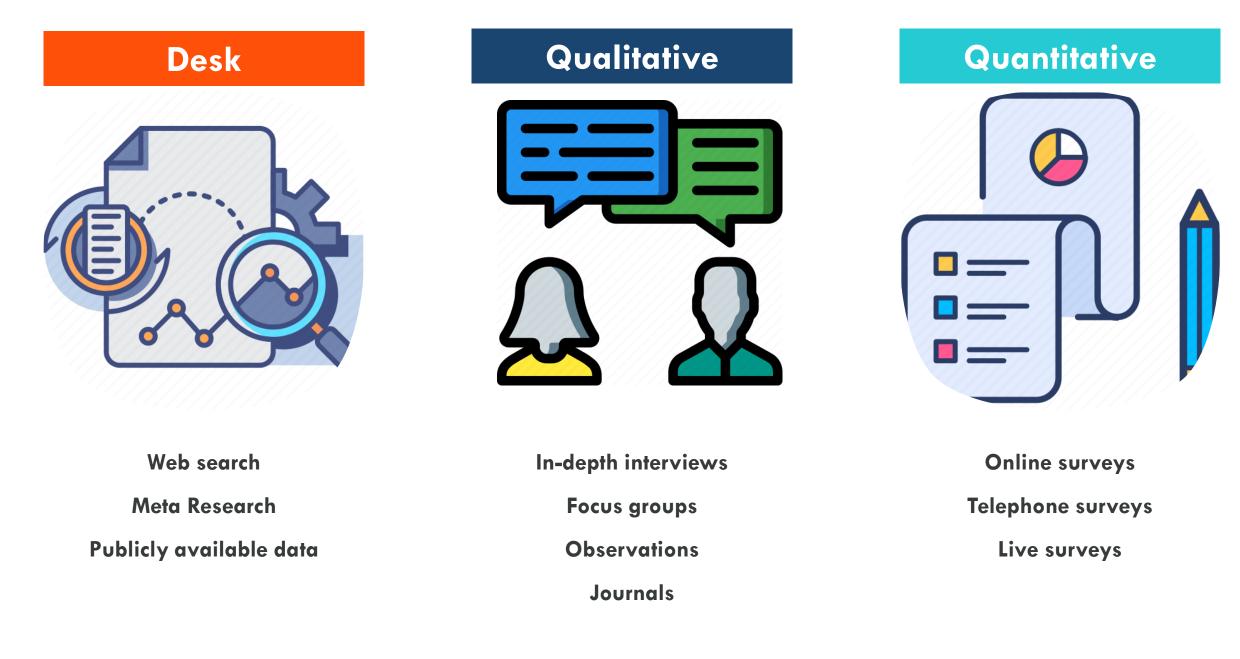
Main segmentation of market research

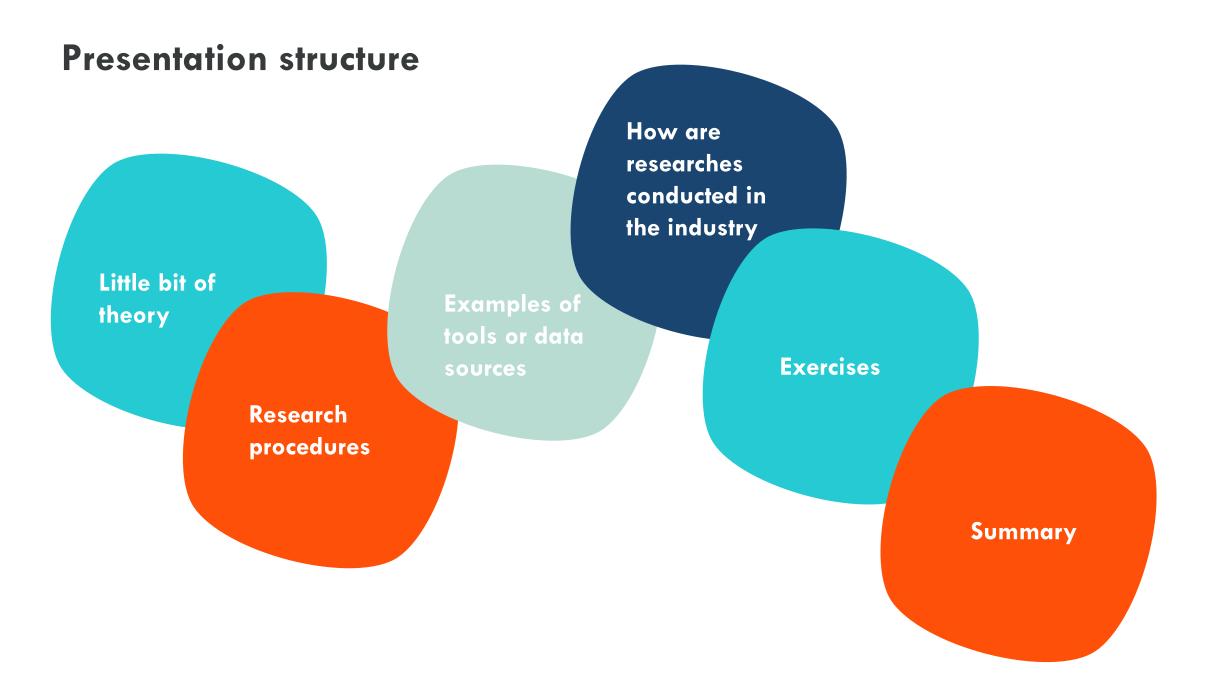
research

of



Segmentation by the type of research





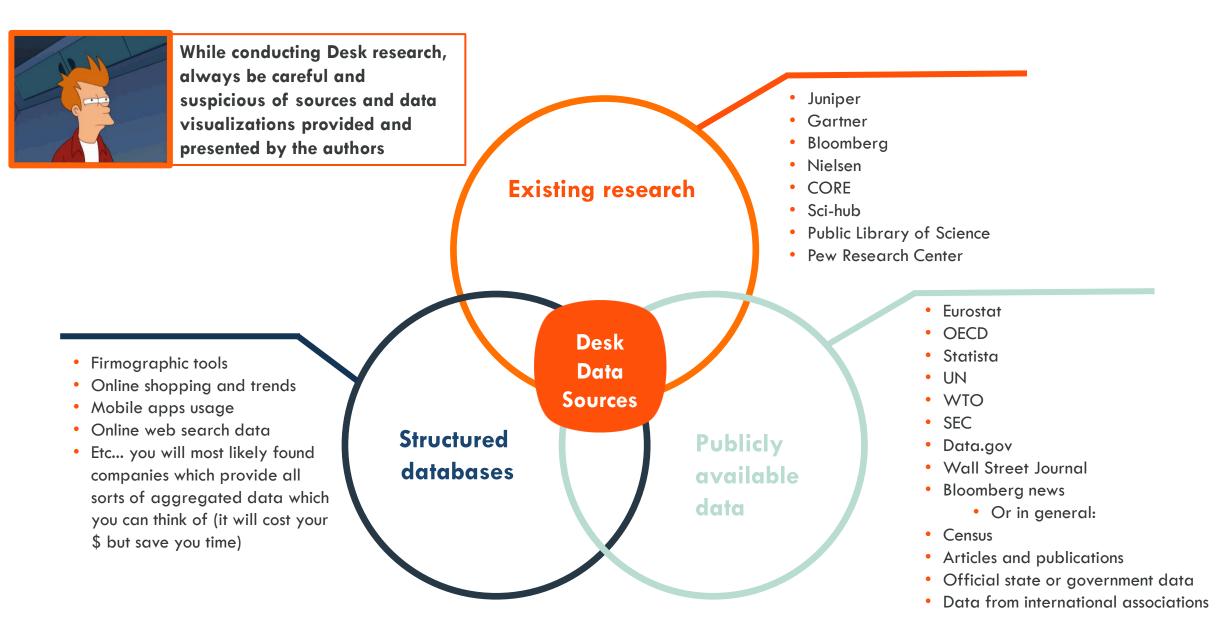
Desk Research

Desk Research

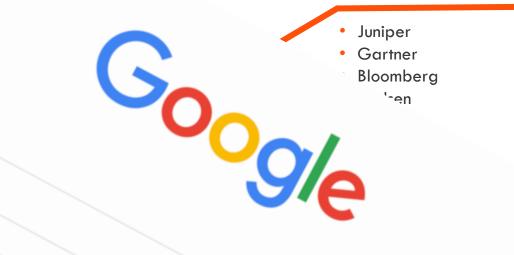
- Also called secondary research
- Always welcomed to be conducted before qualitative or quantitative research
- Used for analysis of existing/available data, but also to get ideas and knowledge about subjects which we want to further analyze
- They are very flexible as they can cover very broad spectre of subjects or go in big depths inside a single subject – all depends on the researcher
- Provide good overview of current state of research methodology and trends on the market which can be later further evaluate or expanded by conducting our own primary (qualitative or quantitative research.



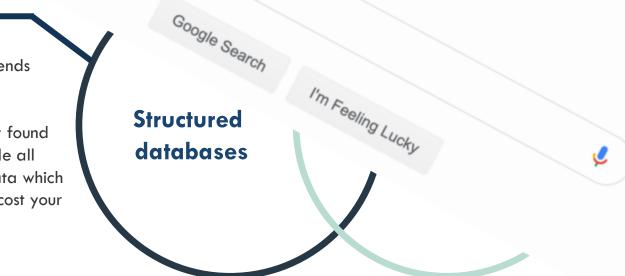
Sources for desk research (only same of... infinity)



(only same of... infinity)







• Firmographic tools

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- Online shopping and trends
- Mobile apps usage
- Online websearch data
- Etc... you will most likely found companies which provide all sorts of aggregated data which you can think of (it will cost your \$ but save you time)

Main steps while conducting an desk research

Define goals

 Very important step because research goals which are not clear will make you loose a lot of time researching either wrong topics or researching (too) wide range of topics which are harder to be summarized later. It is very normal to reevaluate and even change research goals at later stages of the project, but having as clear as possible beginning always helps

Collecting data

 Start finding data and insights in already existing, available or to you well knows sources but also google or research for other sources in order to see what kind of researches were previously conducted and also to get good ideas of what and how are particular topics being researched. Be structured and organized in order to later know where and when did you find particular info and source

Structuring data

Categorizing, comparing, aggregating, summarizing, coding... you name it. Turn the data you have found upside down, create structured and organized data set from the data which was collected from different sources using different methodology in different timeframes with different bias

Writing report

 Based on the raw and structured data you have on your hands now, develop conclusions and insights which cover your initial research goals. It is standard to at this point return again to the step 1 and modify or add new research goals based on the insights created by already collected data



Desk researches in the industry

Ensure key requirements to easily conduct quality desk research:

- Enable (buy if external) lots of quality points which cover variety of topics which are interesting to the company
- Ensure that all data (internal and external) are clean, easily accessible and ideally can be easily compared or connected
- Always use blend of external and internal data
- Have a very clear request from the stakeholder (know what you are researching, why and which action steps will be potentially taken from the research)
- Have clear expectation on the stakeholder side on what they can expect from the research
- 1. Operationalize all research subjects and topics given by the stakeholder
- 2. Overview and gathering of **internal data** about the given subject (good to be introduced to the subject from the stakeholders point of view)
- 3. Overview and gathering of **external data** from various sources
- Interim (half finished) report being presented to the stakeholder *optional step
 if needed review and repeat steps 1-3
- 5. Summarizing and aggregating collected data
- 5. Finalizing report with remarks, notes, insights and conclusion from the research

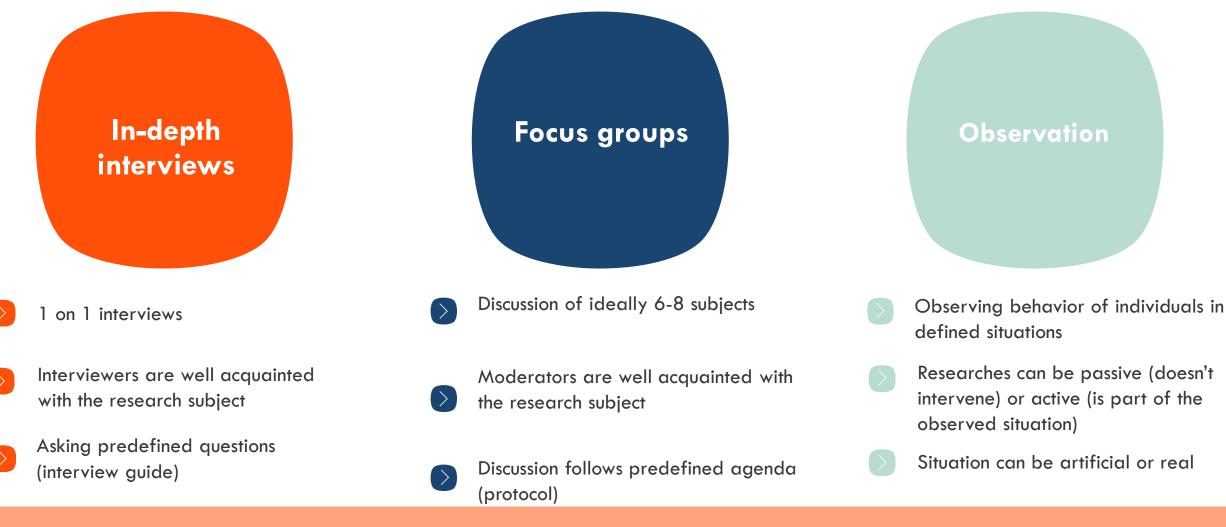
Qualitative Research

Qualitative research

- While analyzing the results of an qualitative research, the emphasis is on the content (quality) of the data we have and not on the frequency (quantity) of it
- It can easily go in the depth of the research subject without requiring large amount of participants
- Methodology and data collection process is less structured although one should always aim to introduce as much structure in those processes in order to keep the individual data points being collected in a very similar manner
- When analyzing the results, emphasis is again on the content of an idea or the value it brings and not on the number of participants who state the same idea
- Qualitative research focuses on analysis of word, text, content as opposed to analyzing numbers



Some of qualitative research methods



Other types of qualitative research include methods such as online forums, social network analysis, diaries etc.



Target audience



Individuals who are accustomed with the research subject – consumers of a products or service, potential clients itd.



Segment participants

Divide participants in groups (segments) – individuals who are consuming particular brands, who are consuming products more often (heavy user) or less frequent (light user), age, gender, etc.



Create screening questionnaire

Based on the definition and segmentation given in first two steps, create set of questions which would qualify individuals to participate in the research



Find participants

Apply screening questionnaire on a randomly sampled group of people and find participants which are willing to participate in the research

Research guide and protocol

- Beside the screening questions, it's important to define a set of research questions which will be asked to all participants during the interview or focus groups
- Questions are asked by **interviewer** (during interviews) or **moderator** (during focus groups) which should be **unbiased**.
- Research guide and protocol serve as an agenda and help interviewer and moderator to remind him/her of the activities or question order, timeline etc., in order to keep all interviews and focus group similar across the research
- Beside the helping function, guide and protocol also ensure that all interviews and focus group have similar activities and questions across the whole research so that the final results are comparable and can be aggregated
- One can also write down all potential sub-questions which can be asked to the participants, although decision to skip some sub-questions or insists on others in order to get the most of the respondent rely mostly on the **experience** of the **interviewer** or **moderator**.



Focus group protocol example

Vehicle Instrumentation Preferences Focus Group Protocol

Date/Time:

Moderator:

Welcome, Intro:

Thanks for coming today. I'm (NAME) and I'm going to be the moderator for this group. I'd also like to introduce (NAMES OF CO-MODERATOR, OTHERS).

Informed Consent, Oral Notification of Taping:

Before we begin, I need to ask you to sign the informed consent document you have in front of you. Would anyone like me to read it out loud? Do you have any questions about it? READ IF NEEDED AND ANSWER QUESTIONS – ASK THEM TO SIGN THE FORMS AND COLLECT THEM.

We mentioned this before but just to remind you, this session is being audiotaped. We will be using these only for making the transcripts, which will not contain your last names. After that, the tapes will be destroyed. Does anyone have any questions or objections?

Ground Rules for Group:

Let me give you a few quick ground rules for the group. First, everyone's opinion is valued and it's OK to disagree with each other or with me. We are very interested in hearing about all points of view. It's OK to talk to each other and not just to me. It's OK to get up for more coffee or to go to the restroom and since our time is limited I may need to ask you to stop and change topics from time to time. I'll give you the "Time out" sign if we need to do that.

Introduction of Participants:

Now I'd like to go around the table so each person can give me their first name only and tell me in a few words something they did this week that was important or fun. Again, no last names or other information that would identify you and keep it short, please.

Introduction of Subject of Group:

The primary reason we are here today is to talk about cars, specifically the instrument panels or dashboards. Some of the specific things about dashboards we would like you to talk about are the location of dials, switches and levers and how easy these are to use. We are also interested in dashboard lighting. We are not only interested in the dashboard

of your car but also those you have seen perhaps in friends' cars or rental cars. You should also talk about things you would like to see in cars that you have never seen before. Things you would put in a car if you had to make one.

Involving Exercise:

I want to start by asking each of you to tell me the first thing you think of when I mention "dashboard". I will start, "cluttered". SKIP AROUND THE TABLE, WRITE WORDS ON FLIP CHART.

General Discussion:

LOOK AT WORDS AND PICK A FREQUENT OR USEFUL WORD FOR A DISCUSSION STARTER AS WELL AS A PERSON WHO SEEMS READY TO TALK.

ASK: (NAME), you've said (WORD or PHRASE). Please start up by telling me more about why you said that.

NOTE FOR ANYTHING MENTIONED IT MAY NEED TO BE CLARIFIED AS TO WHETHER THE COMMENT IS POSITIVE OR NEGATIVE

Gauges

EXPLAIN TO THE GROUP THAT BY "GAUGE" WE MEAN A FUEL INDICATOR, ENGINE TEMPERATURE, SPEEDOMETER, ET CETERA

NOTE THAT COLOR AND LIGHTING ISSUES APPEAR BELOW. THE INTENT HERE IS TO FOCUS THE DISCUSSION ON GAUGES IN TERMS OF THE INFORMATION THEY ARE MEANT TO PROVIDE.

- · Do you think there are too many gauges in vehicles? Why or why not?
- Do you have problems seeing the needle some on the speedometer or on other gauges?
- Do you limit driving in extreme brightness or at night because of the ability to see the speedometer or other gauges?
- Do you think there are too few gauges in vehicles? If so, which additional gauges would you like to see?
- · Which gauges do you use most frequently?

- · What do you think are the most important gauges?
- Do you prefer gauges that use needles as indicators or do you prefer computerized/readouts?

Knobs & Switches

NOTE COLOR / LIGHTING/ PLACEMENT ISSUES APPEAR BELOW. THE INTENT HERE IS TO FOCUS THE DISCUSSION ON KNOBS & SWITCHES IN TERMS OF THE FUNCTION THEY ARE MEANT TO PERFORM.

- · Do you think there are too many knobs and switches vehicles?
- · Do you find certain types of knobs and switches easier to use than others?
- · Do you prefer large or small knobs? Why?
- · Would it be a problem for you if the knobs were different sizes? Why?
- · Should knobs and switches only do one thing or server multiple purposes?
- · Do you know the function of each of the knobs and switches in your car?
- Do you have a hard time using the controls for your side-view mirrors? If so, why?
- Would you prefer to "tell" the car what to do instead of having to operate knobs and switches?

Lighting

- When you drive at night is the dashboard too dark or too bright?
- · Do you know how to adjust the brightness on your dash?
- If you have the gear shift on your steering wheel, do you have difficulty seeing the gear indicator?
- · Is the color of the lighting on your dashboard distracting? If so, how?
- Does the color of the lighting on your dashboard make it harder to read the speedometer or other gauges? Do certain colors for the lighting cause a lot of

Data analysis

Recording

- All interviews and focus groups should be recorded so that they can be relistened or reviewed later and analyzed to the detail
- Recording of the research should always be mentioned to the respondents while they are being invited to participate and than once again before the recording itself

Creating transcript

- Recording is later retyped in to a transcript document for easier analysis
- If needed, one can also type down all nonverbal communication which can give in insights in the communication (emotions, head nodding, waving hands, etc.)
- Always type transcript in this format: Moderator: Where do you work?
 Person A: In Infobip Moderator: How long do you work there?

Transcript coding

- Once the transcript is created, one has to read it in detail and mark (code) all citations which seem relevant to the research topic and give insights. Citations are marked with different colors where each color represent one group or category of subjects
- Transcript coding gives a lot of structure to the data which was initially unstructured and makes in easier to analyze and draw conclusions from it

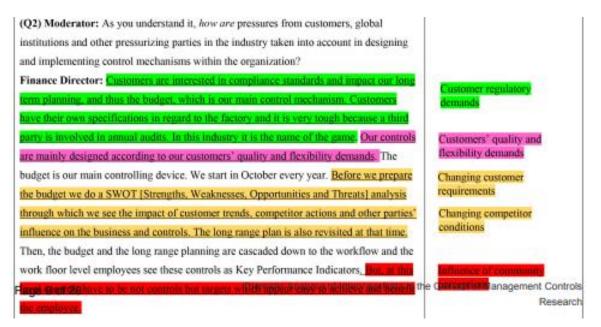
Writing report

- Since the data is less structured (compared to the quantitative sources), researcher has greater freedom in deciding on how to group, interpret and present data in the report
- Usually result follow similar idea and order of the question order from the guide/protocol and are grouped based on the subjects found while coding

Transcript coding example

Data	Codes
(Q1) Moderator: What do you think about the apparel industry in Sri Lanka? Who are	
the customers, competitors, suppliers and influential parties and what is their influence on	
the business and management controls of the business?	
Finance Director: Global competition and GSP plus [Generalized System of Preferences]	
and the Trans-Pacific Trade Partnership have a direct impact on our operations, and on	Global statutory rules
management controls. More than 60% of Sri Lankan apparel exports are to the United	Customer regulatory
States and other Western countries. Our operations and controls have to focus on their	demands
demands in order to survive in the market. In the meantime, competition in the industry is	Influence of changing
increasing from emerging countries like Laos, Cambodia and Vietnam. So, our controls	market conditions
have always to focus on reducing costs and producing products at competitive prices. The	
economic environment of our country too is not supportive of the apparel industry	
because other industries such as tourism and hospitality are growing. Thus finding labour	Facing changes in the
for the apparel industry will be difficult in about another five years because they expect	industry
simple and understandable controls on the workflow. When designing controls, we have	Influence of commun
to think about how to simplify them. So, if we don't go for proper management and	perception Easing shapped in the
controlling strategies and innovation we can't sustain the industry. We have to definitely	Facing changes in the industry
rely on high end customers.	
The other influential parties in the apparel sector who influence implementation of	Influence of communi
controls would be trade unions and the work force because, if any controls are complex	perception
and impact on their workloads, they tend to reject or respond to them negatively by	Influence of organized labour
reducing production. Pressure groups and organizations concerned with the apparel trade	
such as the Wages Board of Sri Lanka, Chamber of Commerce, Sri Lanka Institute of	Influence of local org
Nano Technology, Sri Lanka Apparel Exporters Association, Sri Lanka Standards and	regulations
Central Environmental Authority also come into play. For example, as a company	Influence of local
operating under the Wages Board, we have to limit our work hours per week. Any control	regulations
has to be designed and implemented considering this factor too.	

anized



Useful tools when conducting qualitative research



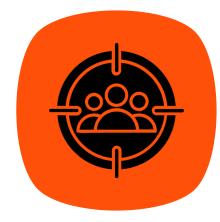








How are qualitative research conducted in the industry



Expert Networks

- Are companies which have good network (called panels) of experts in all sorts of fields who have given them• consent to take part in interviews or focus groups
- Based on our research specification and screening criteria, those companies can find experts which are suitable for our needs and connect us with them.
- Price of one hour talk with an expert usually starts at 100\$ and can be a lot higher



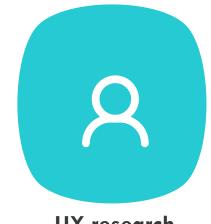
Carrying interviews and focus groups

You can either have a professional moderator or interviewer conduct the research for your or stakeholders/requestors can do it themselves but than they risk of introducing bias to the research



Data analysis

- Expert network companies automatically send recordings and transcripts.
- Reports are than being written based on coded transcripts, notes from the research, internal data etc.



UX research

- UX Research are usually being conducted internally by each business (in IT atleast).
- Gives good knowledge on how the users will accept new features in the product or how they are interacting with the product currently

Focus group simulation

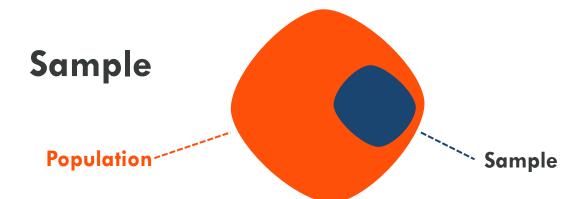


Quantitative Research

Quantitative research

- Main idea is to collect larger sample of data (responses) via structured sources (questionnaire) and than conduct statistical analysis
- Structured questionnaires ensure that all respondents go through identical set of questions and give their response in the same manner. That enables us to statistically process the data, but prevent us from asking sub-question or deep dive into particular subject during the survey (which is the case with qualitative research).
- **Bigger sample size** also give us the opportunity to generalize data based on specific sample on the general population and to also compare (statistically) results between two or more groups of respondents (e.g. Males vs females)
- Surveying the respondents can be conducted via telephone (CATI), online (CAWI) or live (PAPI – paper and pen or CAPI – programmed questionnaire on a device)





 Before the start of the data collection, define target audience from which we want to get responses from the market. Usually, we try to get information from people who are using or could be potential users of our products or services – people relevant to the subject of the research

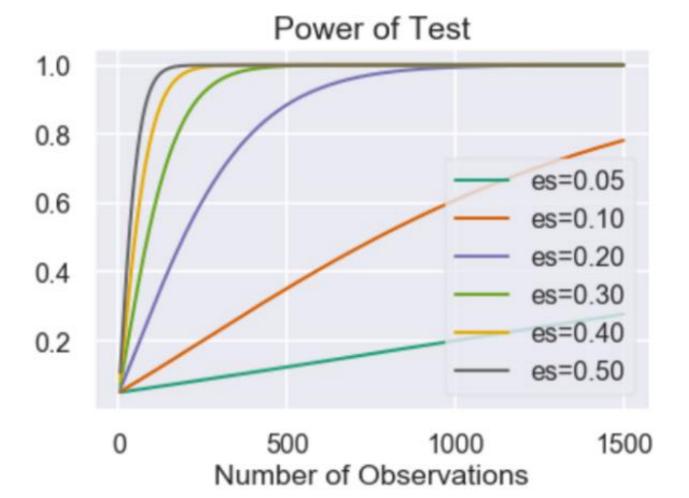
Sample size: depends on the population on which we want to generalize collected data. The bigger the target population, the bigger the sample size we need in the research Beside the size of the population, sample size also depends on the number of respondents subgroups which responses we want to compare. Rule of the thumb is that you need at least 20 respondents per subgroup, but it is advised to get at least 50 respondents per subgroup. Of course the bigger the sample size the better

Ø

• National representative sample: in B2C research, one often tries to achieve nationally representative sample size of the target population. Attributes which are usually taken into consideration are age, gender, region/country, size of the town, income, etc. Target size of each attribute are taken from the last official census.

• Quotas: are used in order to ensure that final sample includes exact amount of respondents per each attribute according to the set quota. Respondents belong to a quota based on specific answers they give during the survey.

Importance of sample size



Determine Sample SizeConfidence Level:95% 99%Confidence Interval:3Population:4000000CalculateClearSample size needed:1067

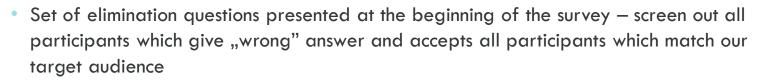
Screening questionnaire



Who is in target audience How many different types of for this research?

subgroups we want to compare?

How are quotas set up?



- In the screening questionnaire, one should avoid open ended questions and questions with "Yes" and "No" answers because on the open ended questions, you can't set up any elimination rules, while dichotome questions don't ensure good protection against falsely positive selection of respondents
- Based on that premises, always present multiple different answers to participants, e.g.:
- Do you consume chocolate?
 - Yes
- No

- Which of the following products are you consuming at least 3 times a week?
- Candy Biscuits
- Crackers
 - Chocolate Chips





Ensures that we include only relevant participants in our research



Ensures that our sample is representative toward the target population



Based on specific attributes prevalent in each subgroup, enables us to compare results between them

- Reduce cost of the whole research
 - Increase the experience of the participants

IS

- Screens out biased participants
- Ensures that the final sample is as similar to the target population

Example of the screening questionnaire

Screening questionnaire

S1	Thank you for your interest to participate in this survey. [Insert agency name] is conducting a global customer survey about your basic usage of different mobile applications. Please note that participation in this survey is not obligatory and that all your responses will remain anonymous. Are you willing to participate in this survey, it will take only 15 minutes of your time?		
PI:	: SA		
1	Yes		
2	No	SCREENOUT	

S2	Mark your gender	
PI:	SA	
1	Male	Quota: 50%
2	Female	Quota: 50%

S 3	Enter your age	
PI:	Numeric	
1	Age:	

S3a	Age groups	
PI:	SA, <u>Do</u> not show to respondent, fill from S3	
1	Below 18 SCREENOUT	
2	18-25	Quota: 23%
3	26-35	Quota: 24%
4	36-45	Quota: 21%
5	46-55	Quota: 19%
6	55-65	Quota: 13%
7	66+	SCREENOUT

S5	Which of the following mobile apps are you using every day, at least 3 times a week or not
	at all?

PI: Grid, MA per row, Rotate statements

	Statements/Answers	Every day [MA]	At least 3 times a week [MA]	Not using at all [MA]
1	Facebook			
2	Instagram			SCREENOUT
3	Camera			
4	Viber			
5	Messenger			
6	Youtube			
7	Telegram			

S6 How much time do you spend actively using your smartphone on an average week

PI: SA

1	3 hours per week	SCREENOUT
2	7 hours per week	
3	14 hours per week	Quota: Light users – 50%
4	21 hours per week	
5	28 hours per week	
6	35 hours per week	Quota: Heavy users – 50%
7	More than 35 hours per week	

Main questionnaire



Which information we don't have, but need for our business? Which subjects do we want to explore with our audience? Which actions can we do with the data from this research?

- Consists of sets of questions which are presented to the participants who have successfully passed screening questionnaire
- This set of questions is best made in several iterations where we repeat the process of adding/removing and changing existing questions until we are entirely satisfied with the outcome. It is important not to rush this process and test it out before start with the data collections process. It's important to create:
 - Set of questions which are understandable to the broad population
 - Question order which is logical and not confusing
 - Questionnaire which is not to dull or exausting



Data can be better analyzed by combining answers from multiple questions

Includes bigger and "more

important" part of the

auestionnaire

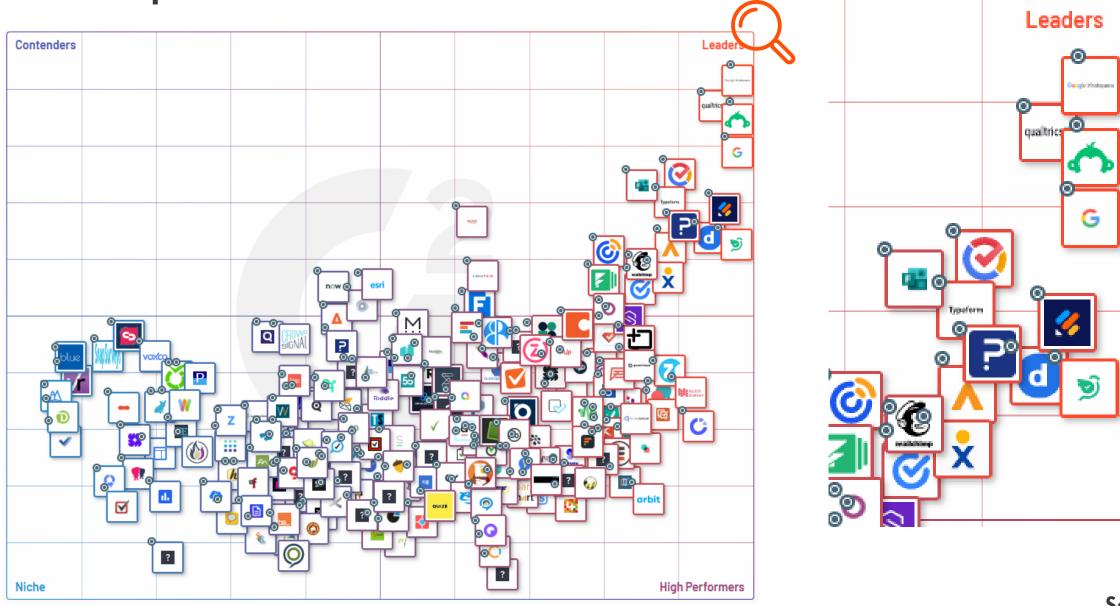


Main conclusions and insights come out of the main questionnaire



- "Heart" of the whole survey badly formulated questions can't provide quality data
- It always pays back to spend a little bit more time to create quality questionnaire than to get bad data in return and spend even more time trying to create meaningful insights

Useful questionnaire tools



Source: <u>G2</u>

Data Analysis

Descriptive statistics

- Raw data are stored in tables (dataframe) – each row represents one respondent, while each column represents one question or option
- >

Tabular data – for each question and each option, show sample size, frequency and percentages (best for high level overview and data exploration)



- Compare results between demographic variables (age, gender, location, etc.) and defined subgroup (heavy user, light users, etc.)
- Compare and cross answers of one questions with the answers from another questions (e.g. Compare consumption habits between those who stated that brand plays the most important role against those who state that price is more important)

Significant statistical difference

- Most frequently used is basic t-test with 95% confidence
- Calculate significant difference between all options inside a question
- Additionally calculate significant difference between all options between segments (subgroups)

This three steps in the data analysis will cover majority of data manipulation and exploration which will bring you clear and meaningful insights

Advanced analytics (few of many)

- <u>MaxDiff</u> shows comparison of perceived importance between different options. Instead of evaluating each attribute on a scale from 1 to 5, in maxdiff analysis, participants have to chose the most important and the least important attribute. The same questions is asked multiple times with rotation of different attributes. By repeating questions/attributes, you get big pool of datapoints which are than statistically calculated into "utility" marks
- <u>Conjoint</u> in-depth analysis on how are individuals evaluating importance of specific elements of a single product and how are they choosing between two or more similar products. During the setup, you define different elements of a product and different levels for each individual element. Than in the next set of several questions, respondent is presented with two products with two different combinations of levels per each element and have to chose the best option for them. Price is frequently one of the compared elements
 - <u>Van Westendorp</u> analysis of ideal price for a given product or service. Respondents are presented with a definition of a product or a service and have to define the price which would be: a) to expensive for the product and wouldn't buy it, b) expensive, but would consider buying it, c) price would be a bargain d) price would be too cheap and they would doubt the quality of the product. Based on their given values, analysis creates optimal prices range



How are quantitative research conducted in the industry

- Inside a business you can either pay the agency to do majority of the work while you only supervise or do most of the initial research and preparation yourself while only pay the agency for paneling services.
- Conducting a quality market research requests a lot of time and effort from the working team, but also it requires a lot of effort and time to be put from the stakeholder (requestor) side who has to know what exactly he wants to get from the research and be active while defining target audience and questionnaire

- 1. Getting request from the stakeholder
- 2. Defining research subjects and target audience
- 3. Creating screening and main questionnaire
- 4. Finding agency which will find panelist (if you are from the business side)
- 5. Conducting research and data collection (fieldwork)
- 6. Data analysis and reporting

Questionnaire tool demonstration in JotForm

- Show/hide question rules
- "Other" option
- Option rotation
- Report sample
- Raw data export



- Missing in Jotform-u:
- Don't know option
- Quotas
- Question rotation
- Tabular data export
- Advanced questions
- URL link individualisation

Summary and additional questions

Workshop – create research design

THANK YOU

• "No research without action, no action without research?" Kurt Lewin, social psychologist

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