

Structuring Analysis for Innovation

INSITUM™
INNOVATION
THROUGH
RESEARCH

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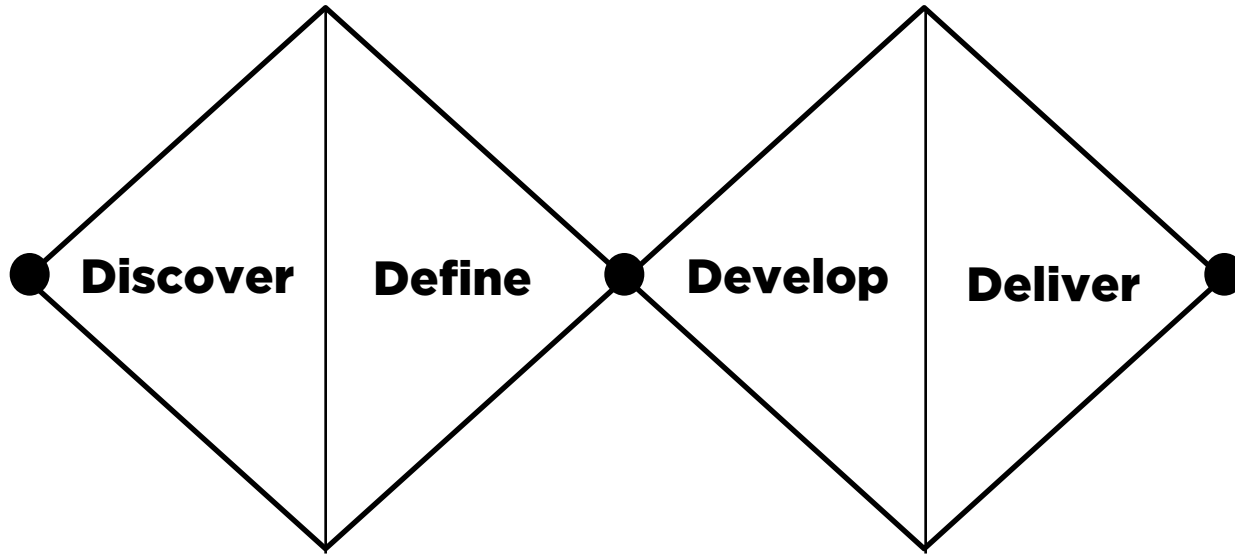
EPIC 2016

INSITUM is a leading strategic innovation consulting firm.

We help organizations solve complex, strategic, and ambiguous problems through people-centered approaches.

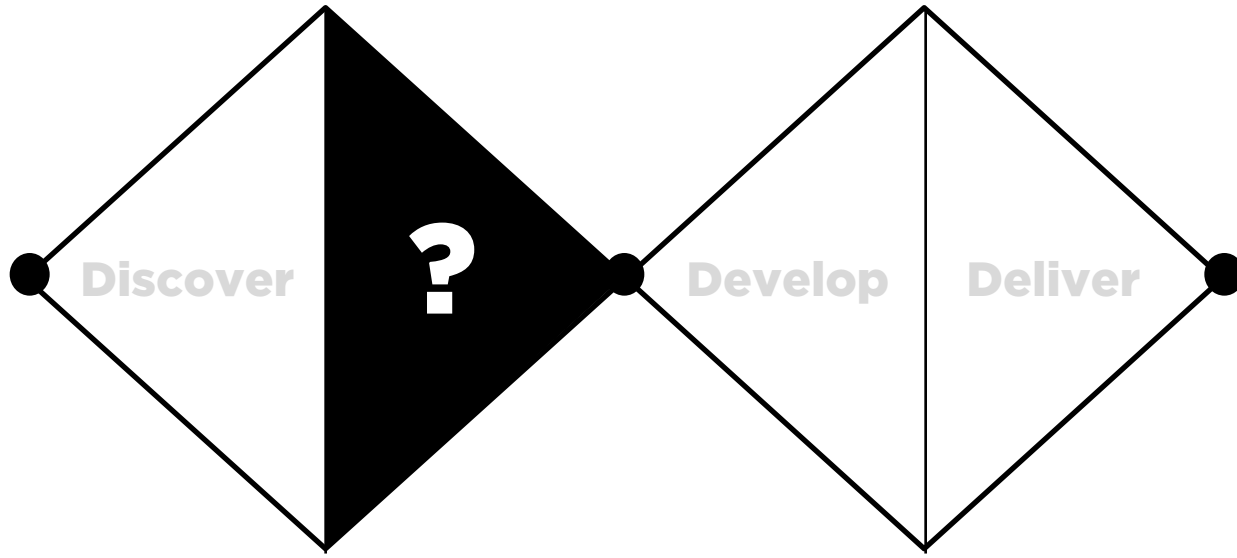


The design process has been widely internalized by organizations that were seeking to innovate.



Source: UK Design Council, 2005

Although it has been practiced by people from different backgrounds, data analysis seems to be a black box for most non-researchers.



Source: UK Design Council, 2007

Analysis methods?



“ Please, don't deliver us
another set of personas.
We probably have 50 here...

Client

Multiphase approach

Client/context centered



There was an opportunity to formalize our planning process to help others better **understand their project and research context in order to define assertive analysis approaches.**

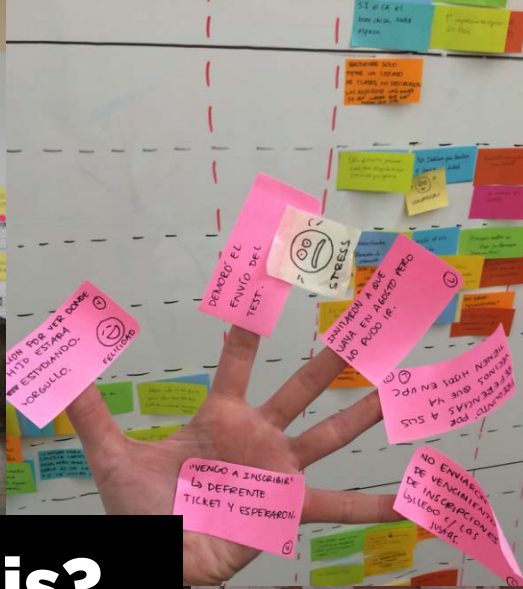
This is what this tutorial is about.

// Activity #1

How is the ethnographic data analysis handled where you work?

The analysis process where I work
can be described with the one word

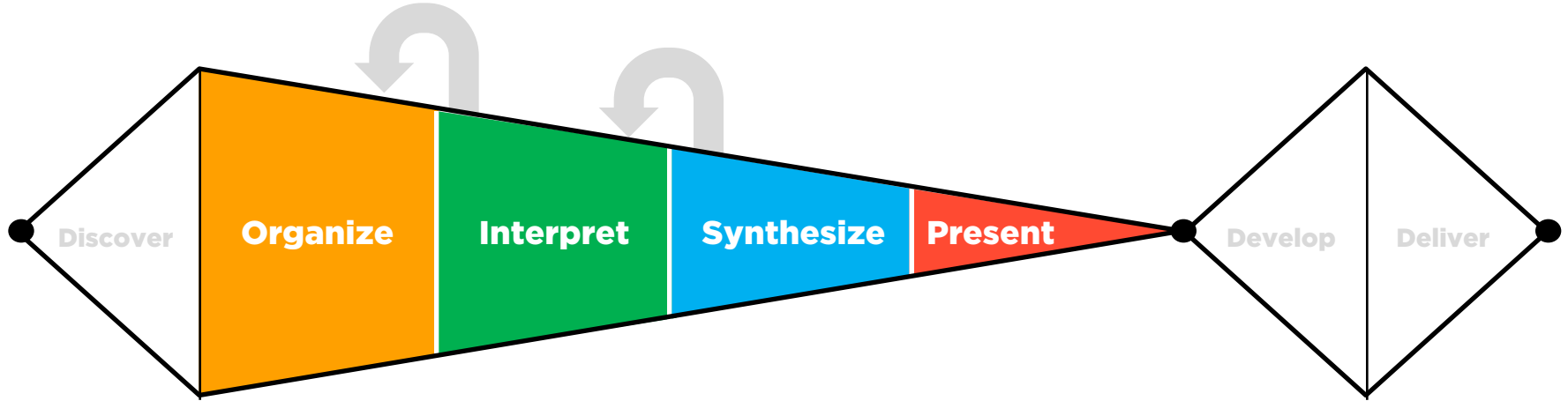
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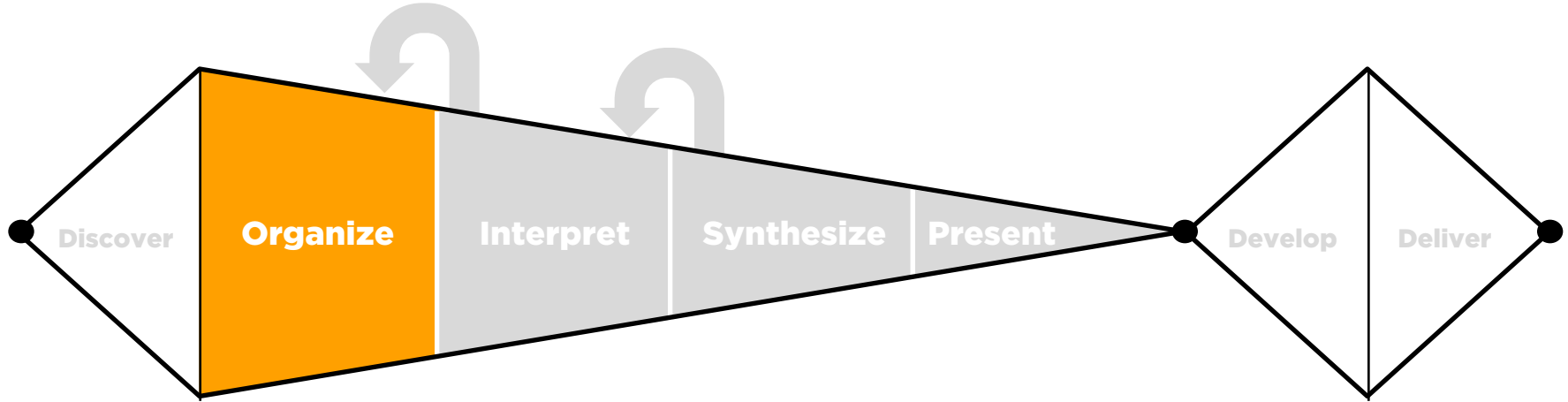
How do we do analysis?



Analysis process phases

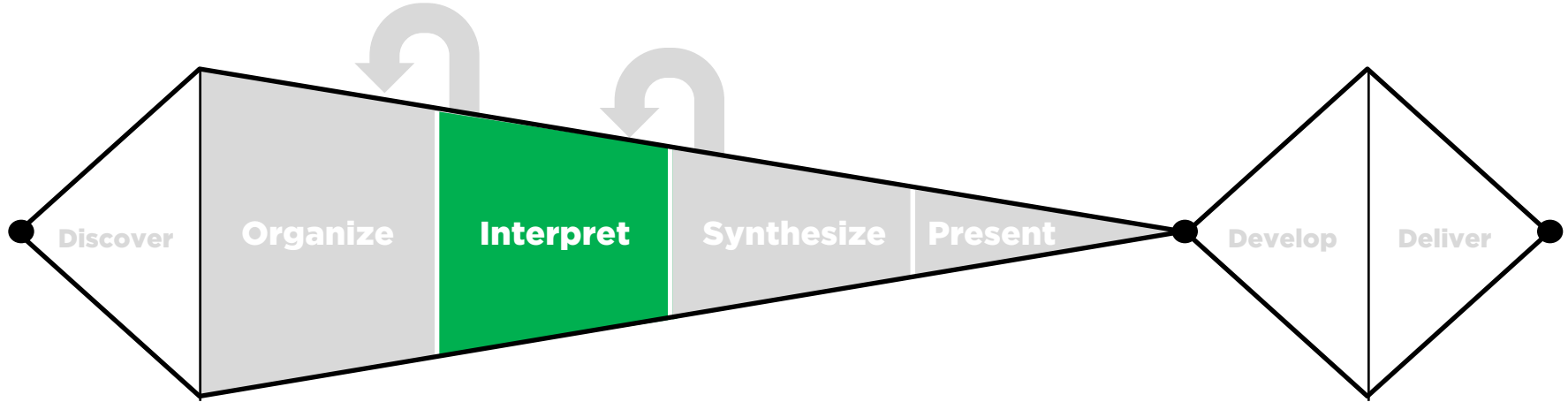


Analysis process phases



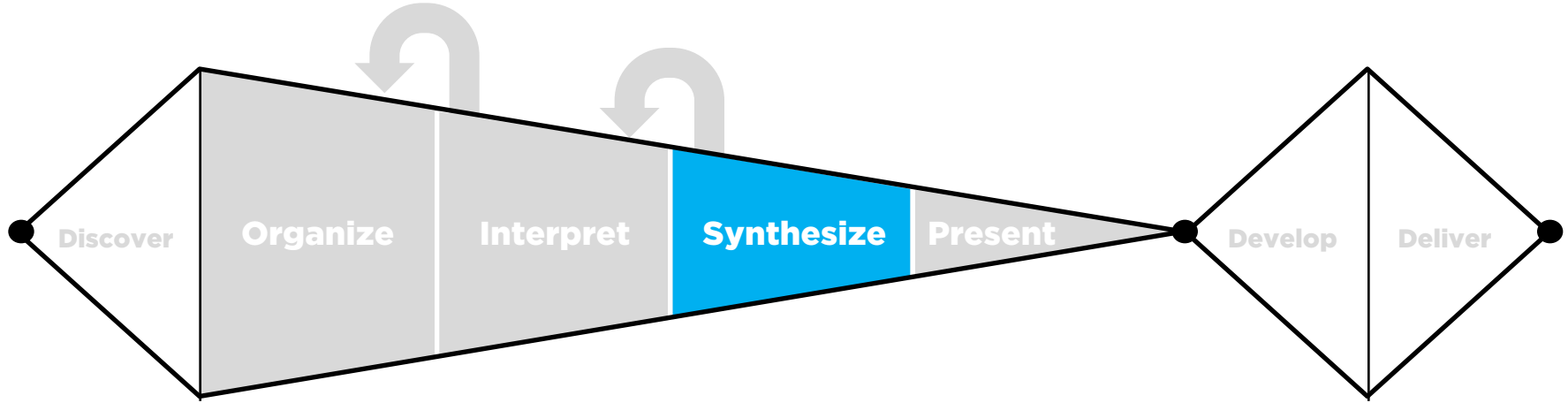
Go through primary research raw data and **extract information** in an organized and structured way.

Analysis process phases



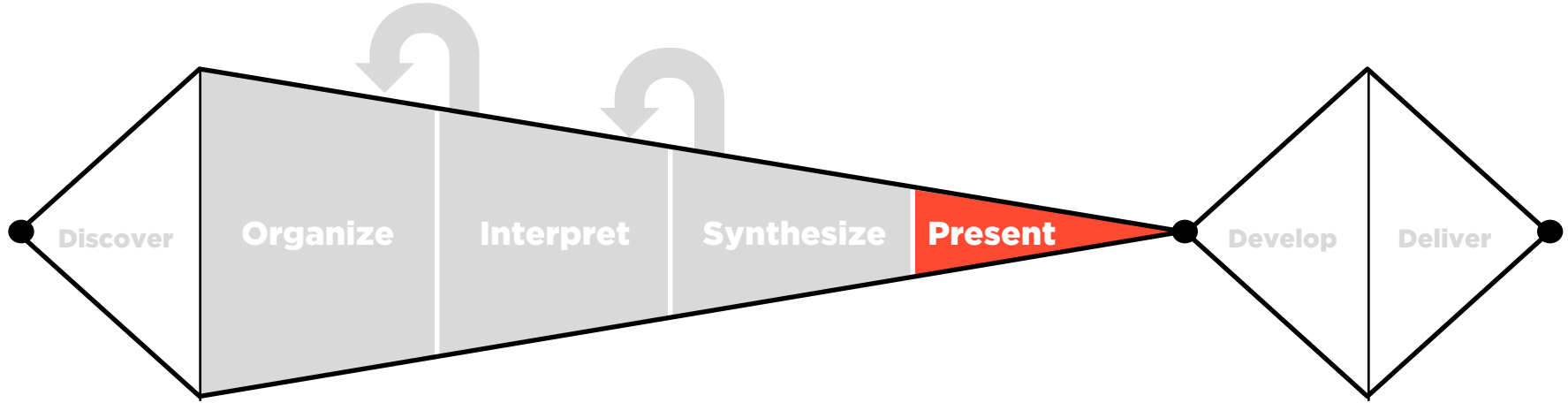
Dive deeply into the downloaded information to **understand the reasons behind the findings.**

Analysis process phases



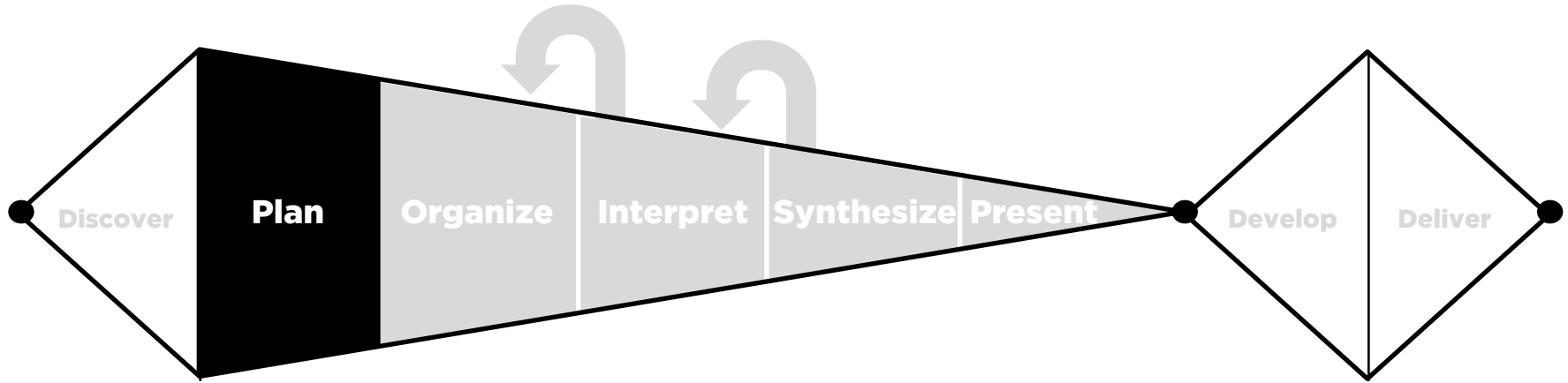
Transform and synthesize the **interpreted information into structured models** that allows for comparison and further interpretation of data.

Analysis process phases



Define **how the analyzed data will be visualized and presented** to its audience.

The planning session



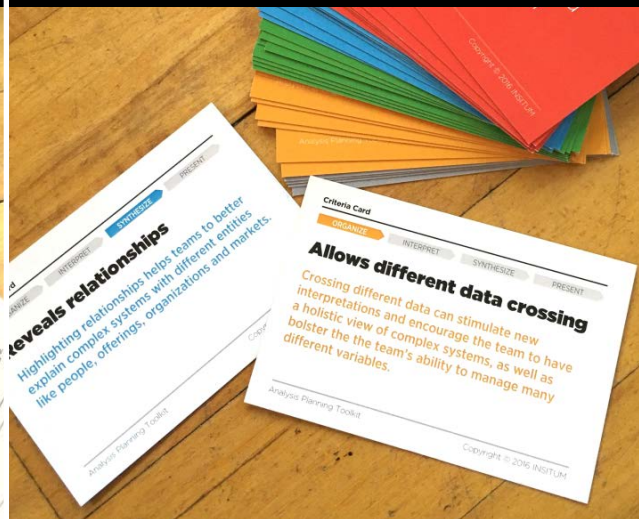
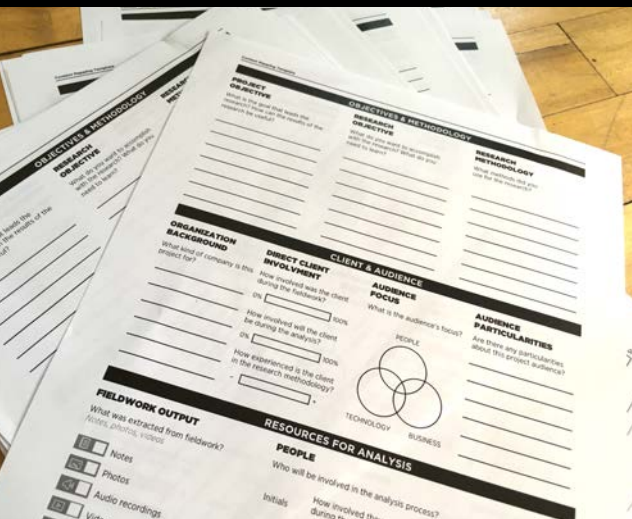
Structured session to **plan ahead for the analysis**: how information will be organized, how it will be used for analysis, and what will be delivered from that.

The planning session

In order to start the planning sessions, we must **map the context** in which the research is part of.

Then, based on that context, we must **prioritize and define the criteria** that will be used to decide which analysis methods will be more impactful for the project

With a clear understanding of the criteria that will be used to plan the analysis, we must then **map the methods**.



0 - Mapping context

PROJECT OBJECTIVE
What is the goal that leads the research? How can the results of the research be useful?

ORGANIZATION BACKGROUND
What kind of company is this project for?

DIRECT CLIENT INVOLVEMENT
How involved was the client during the fieldwork?
0% 100%
How involved will the client be during the analysis?
0% 100%
How experienced is the client in the research methodology?
- +

CLIENT & AUDIENCE
AUDIENCE FOCUS
What is the audience's focus?

AUDIENCE PARTICULARITIES
Are there any particularities about this project audience?

FIELDWORK OUTPUT
What was extracted from fieldwork?
Notes, photos, videos
☐ Notes
☐ Photos
☐ Videos

RESOURCES FOR ANALYSIS
PEOPLE
Who

PEOPLE
TECHNOLOGY
BUSINESS

Objectives and Methodology

- Project objective
- Research objective
- Research Methodology

Resources for Analysis

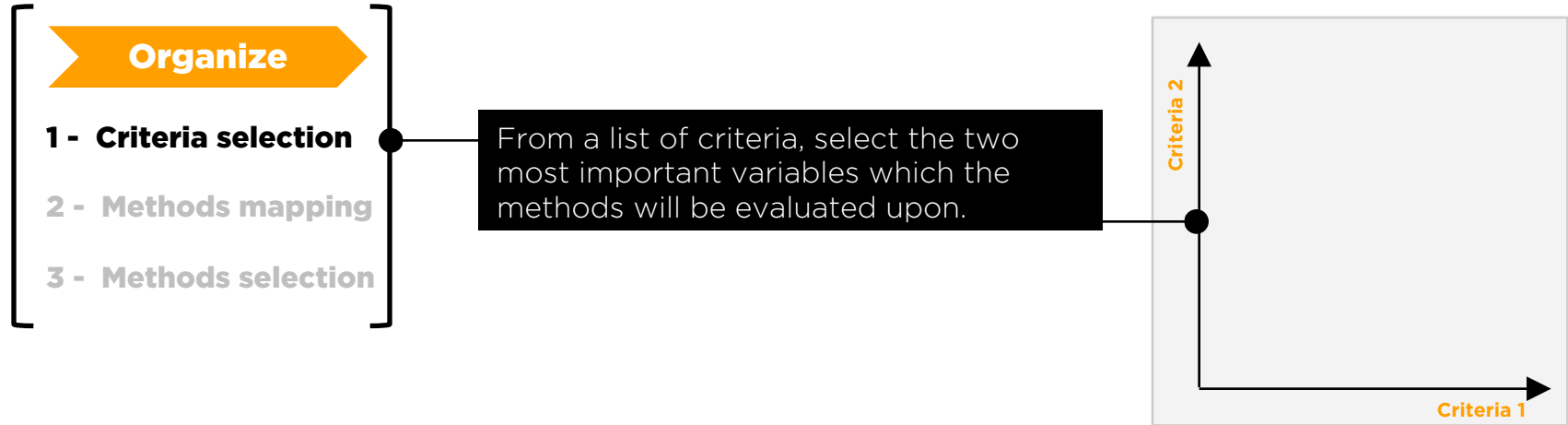
- Fieldwork outputs
- People
- Time

Client and Audience

- Organization background
- Direct client involvement
- Audience focus
- Audience particularities

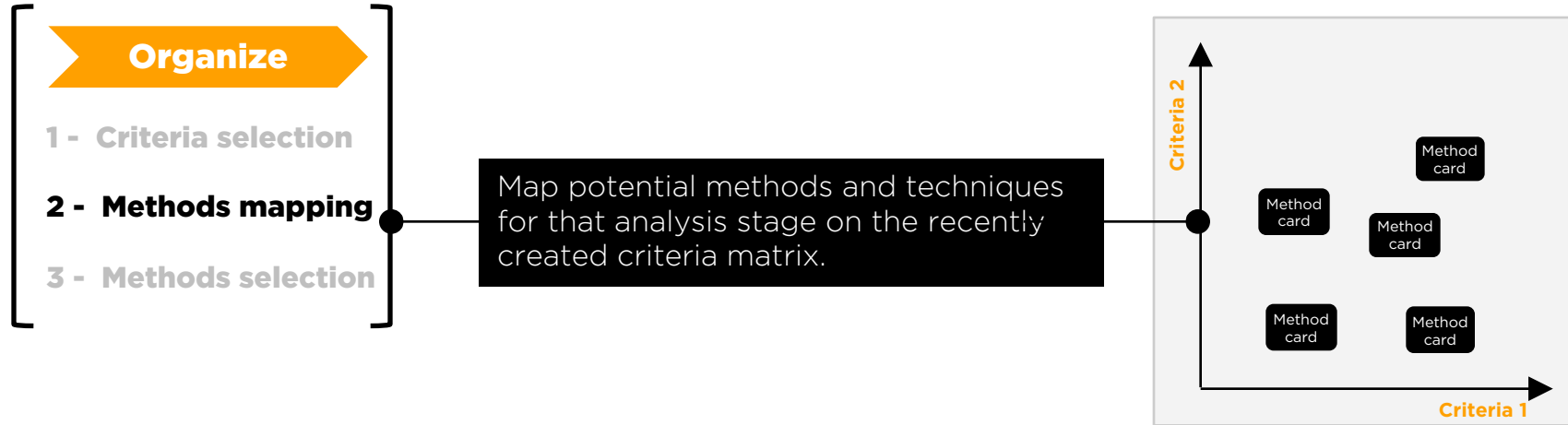
Analysis planning phases

The planning session analyzes each of the analysis stages individually, using a 3-step process for each stage.



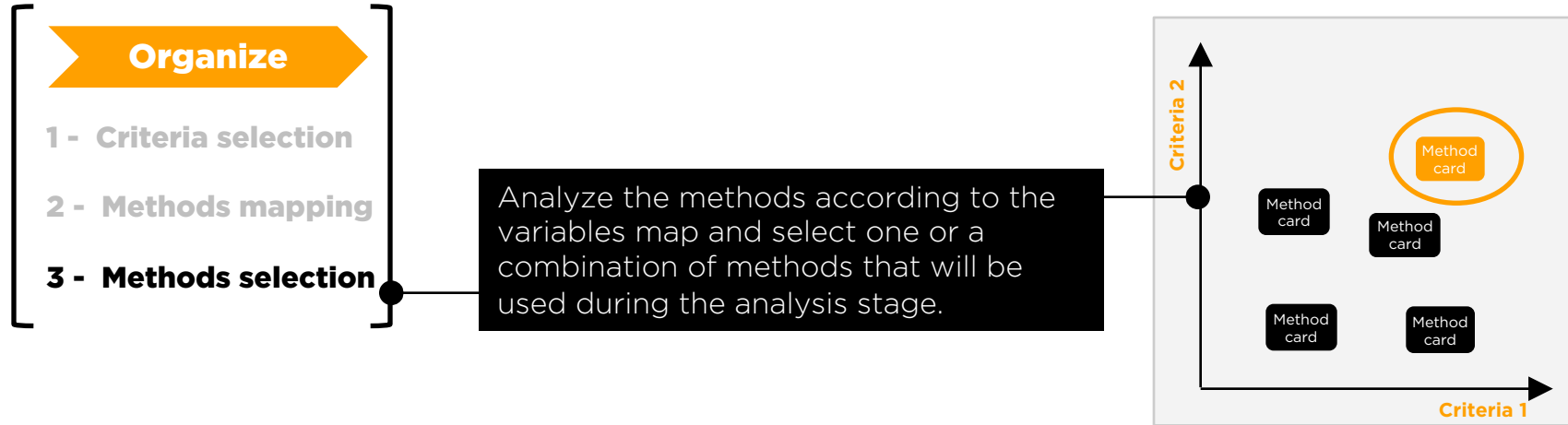
Analysis planning phases

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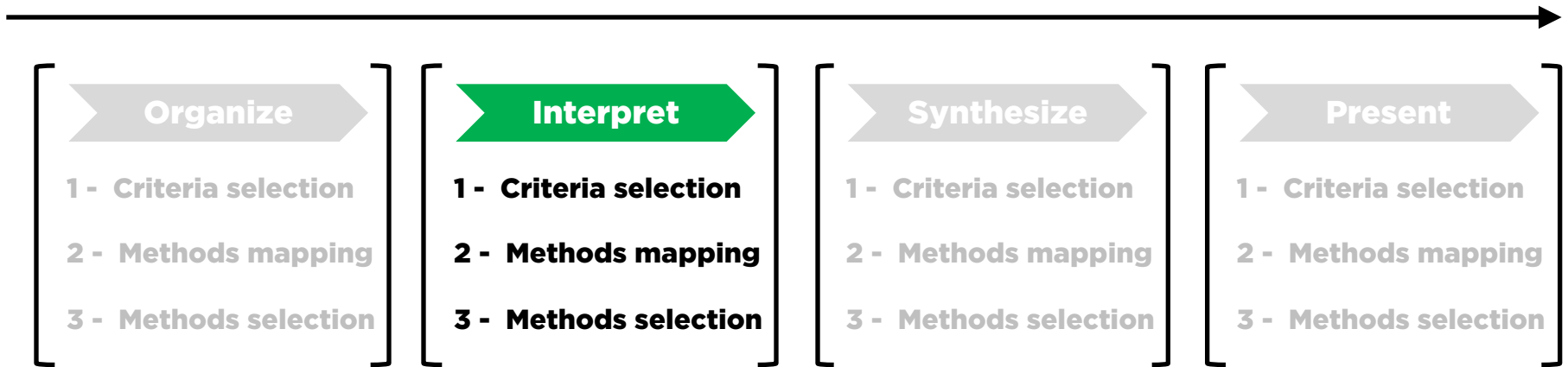
Analysis planning phases

The planning session analyzes each of the analysis stages individually, using a 3-step process for each stage.



Analysis planning phases

Once we're done planning the first analysis stage, we move to the next one.





Let's demonstrate how it goes.

Mapping the context

Context Mapping Template

EXAMPLE

OBJECTIVES & METHODOLOGY

PROJECT OBJECTIVE

What is the goal that leads the research? How can the results of the research be useful?

To explore the development of
upcoming new home
appliances and electronics
in the Brazilian market for the
next 3 years.

RESEARCH OBJECTIVE

What do you want to accomplish with the research? What do you need to learn?

understand the lifestyles,
behaviors, and interactions
that contemporary Brazilian
family arrangements have
with their home appliances.

RESEARCH METHODOLOGY

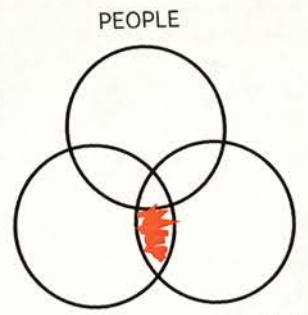
What methods did you use for the research?

Total of 16 3-hour-long in-
home interviews in Sao Paulo
and Rio de Janeiro with same-
sex couples, DINKs, late
parents, people living with
friends, empty-nesters, and
multi-generational family.

CLIENT & AUDIENCE

Mapping the context

multi-generational family.

CLIENT & AUDIENCE			
ORGANIZATION BACKGROUND	DIRECT CLIENT INVOLVMENT	AUDIENCE FOCUS	AUDIENCE PARTICULARITIES
What kind of company is this project for?	How involved was the client during the fieldwork?	What is the audience's focus?	Are there any particularities about this project audience?
<u>An Asian market</u>	0% <u>medium</u> 100%		<u>Small design teams</u>
<u>Leader of technology-</u>	How involved will the client be during the analysis?		<u>spread over the world</u>
<u>driven electronics</u>	0% <u>medium</u> 100%		<u>with little or no</u>
<u>company. Run by</u>	How experienced is the client in the research methodology?		<u>research background.</u>
<u>engineers and like-</u>	- <u>medium</u> +		
<u>minded people.</u>			

RESOURCES FOR ANALYSIS

PEOPLE

Mapping the context

RESOURCES FOR ANALYSIS

FIELDWORK OUTPUT

What was extracted from fieldwork?

Notes, photos, videos



Notes



Photos



Audio recordings



Video recordings



Generative activities



Cultural probes



Other: _____



Other: _____

PEOPLE

Who will be involved in the analysis process?

Initials

How involved they were
during the fieldwork?

How experienced are they in
the research methodology?

MG

0%  100%

Jr.  Sr.

MF

0%  100%

Jr.  Sr.

FF

0%  100%

Jr.  Sr.

YL

0%  100%

Jr.  Sr.

0%  100%

Jr.  Sr.

0%  100%

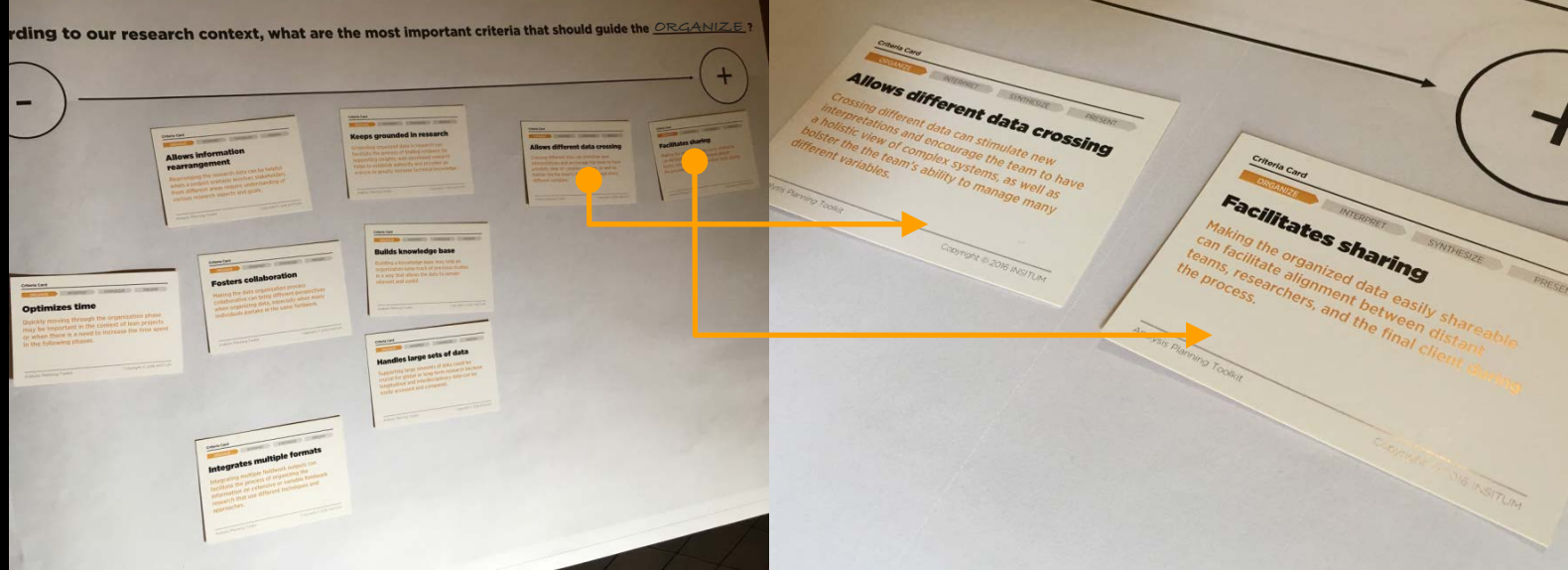
Jr.  Sr.

ANALYSIS TIMEFRAME

How much time do you have to conduct the analysis process? 4 weeks (full-time)

ORGANIZE

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection



Rational

Facilitates sharing

- Fieldwork was carried by multiple teams simultaneously.
- Enable team and client to collaborate during the Interpret and Synthesize stages of analysis.

Allows different data crossing

- Very diversified sample, many different user profiles and specifications.
- Cross-analyzing data is crucial when understanding differences and patterns of different user profiles.

ORGANIZE

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection



Methods that didn't apply for the project's type of research

How much this method will address the following criteria during the ORGANIZE ?



Consolidates context and main findings - very good to share information with people who weren't present at fieldwork.

Can be used as a source to cross information later on.



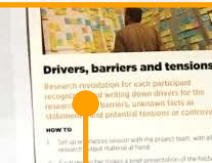
Very good to cross analyze information, as they are being downloaded already in a crossing sections.

However not as easily sharable, as participant's contexts heavily matters on this scenario.

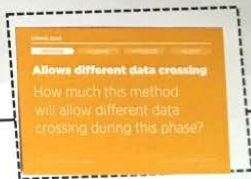


When people aren't physically present, debrief sessions fail in sharing information easily.

Also hard to cross analyze, as the results are broad and extensive.



Very hard to share the results with people who weren't present during the definition of barriers, drivers, and tensions.



ORGANIZE

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection



Rational Analytical debriefs

- Multiple team members could download their own fieldwork information on independent debriefs.
- Each interview was very deep and touched on different discussion topics, as there were many different participant profiles.
- Consolidates a good amount of information, pictures, and results of generative activities, thus making it a powerful sharing tool among team members.
- Even though it doesn't cross information as well as a topic guided framework, it is still possible to cross the debriefs afterward.

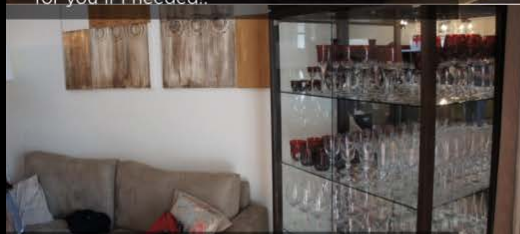
ORGANIZE

1 - Criteria selection

2 - Methods mapping

3 - Methods selection

Analytical Debriefs



Household Structure

Assistance required not only tactically but also at management level.

Claudia is the economic and administrative axis of the house, she rules everything and delegate tasks. She has a nanny who lives by during the week, which is kind of the house manager, who get in touch with the tangible issues and solves/delegate them to the husband. The husband is like an advisor, but he must solve daily issues.

She had two maids, one regular for everyday and one that would come once a week for the hard cleaning. Once the regular one got control of everything and the hard cleaning as well the daily one was released.

The family is basically herself, the husband, her infant son, the nanny and the maid. Her step son (her husband's son) would come by each 15 days.

Keeping the company tasks metaphor, the nanny would be like the vice president, she organizes the staff (including the husband), the tasks and make the direct communication with Claudia, she points out problems, she pass out decisions, etc.

The maid runs the kitchen department. She is responsible for cooking and cleaning, she makes decisions and delegate tasks, even to the husband (asks him to purchase stuff for example).

The husband have basically no decision power on the daily house tasks or planning. He have a voice in some specific subjects that she doesn't consider of much importance such as car management, appliances, etc.

Now she is completely focused on the baby, she is planning the house and prioritizing everything towards him. The most important place in the house for her is the TV room that she spends time with the baby instead of the big living room planned to receive people to talk.

The maid does the minor grocery shop, she goes with the husband once a month to a big box store to make the major purchases.

She consider her family as a playdoh family, one that is attached to each other and would never separate and no matter what one does everyone follows.

House helpers:

- The nanny who not only takes care of the baby but is also sort of the manager of the house, finding issues, solving problems, delegating tasks.
- The maid, responsible for the heavy duty of cleaning and cooking.
- The husband, responsible for aiding the employees in logistics and purchases, and for specific subjects (ones he has interest in) such as cars maintenance, home appliances purchases, etc.

Household Routine

Eating: Busy life ends up making cooking an effortful task that people don't prioritize over others once they can pay to have it done.

She have a very busy life, not finding time to cook during the week, which makes the maid so important in the home. She is in fact used to cook and claims that she is good at it, but even if she finds time to cook she now prioritize other activities, mainly spending time with her baby, because cooking now is related to a task that she can pay to get done.

Cleaning: Maid's service becomes indispensable for a cheerful life.

The maid is responsible for the house cleaning, dishes, clothes, etc. Claudia considers the maid's job as a crucial part of the house environment. Every task performed by the maid is considered cumbersome or distasteful to be performed by herself. To have the maid at home taking care of everything that needs to be addressed is invaluable and she can't consider a scenario where she would be required to do the job by herself instead of spending time with her baby or husband. The maid is so important and powerful at home that she has management powers, similar to the nanny. She isn't only responsible for tactical tasks but she is expected to guarantee the well living inside the house. This responsibility allows the maid to request products and tasks (e.g. go to the market, hire services, purchase products, etc.) to Claudia's husband.

Having fun: Becoming a mother changes the

She enjoy receiving friends for a wine and chatting and she is concerned about this occasion when it comes to house arrangement and priorities. The living room is the biggest room of the house, fully designed to receive guests with comfortable couches, balconies filled with wine bottles and crystal glasses and only pictures and books where it would normally be expected to have a TV, so people interactions and conversations won't be jeopardized by the TV drawing attention.

She likes to bicycling around, she goes to a day club often and like to travel a lot.

However all these behaviors seems to belong to an older stage of life, when she didn't had the baby. Nowadays all her attention is focused to her son, the daily "entertainment" might be considered the time she spends with him, as this is what truly seems to give her joy.

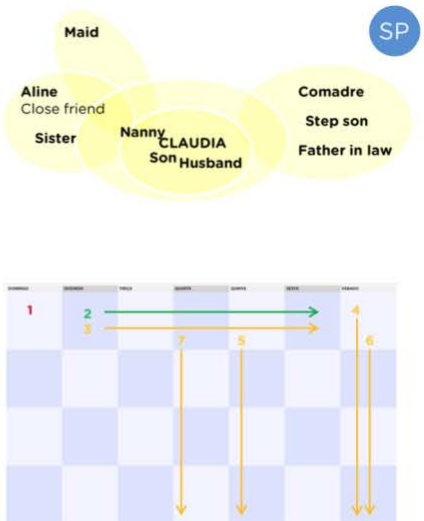
Values

What she values the most is protection for her family and specially for her baby. Physical protection and emotional protection in terms of having a stable and functional home, where the tasks are done perfectly, where the quality of life can be maximized.

She is independent and values being a boss. Independence comes as a reward for her hard working and achieved life position. She likes to control everything and everyone, and likes to ensure that everyone will play their roles correctly in her life, from the maid to her husband.

How is the ideal future for them?

Grow as a super united family
In her ideal future she would be able to spend all the time she wants at home, with her son and family. She would like to work from home, not to work more or to be more focused at it, but to be close to their loved ones. She wants to grow her family united above all things. She needs everyone together and she hopes to accomplish the dream of a big happy and united family.



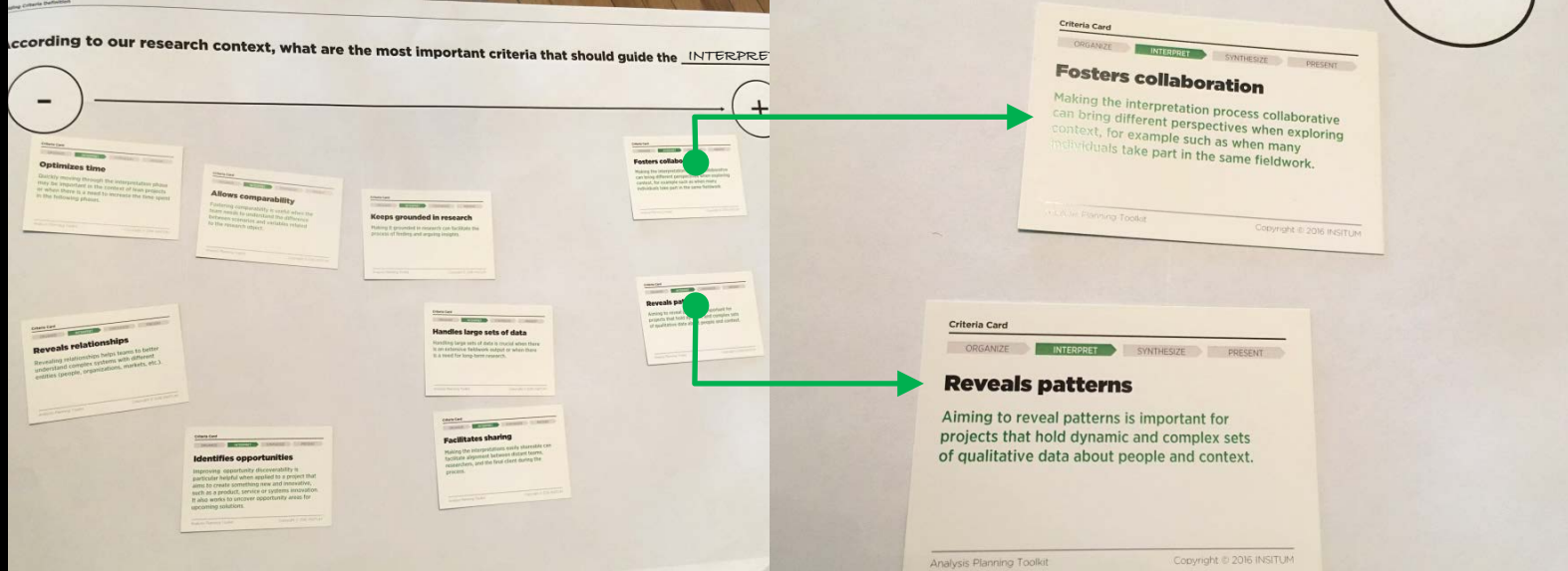
1. Big super market purchase early each month
2. House cleaning by maid
3. Lunch at home
4. Dishes left unwashed
5. Nanny/maid takes dog to pet shop
6. Husband takes car to be washed
7. Therapy

Priority activity

1. Work at home - Work at home so she would be closer to her son.
2. Change the home - Values capability for the house to change to better suit her family needs once the baby and her step son grows
3. Promote encounters - Put the nice living room to a good use, show status
4. Have fun at home - Have fun with her family, specially her son, at the "fun room"
5. Take care of people/family

INTERPRET

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection



Rational Fosters collaboration

- A big team would benefit from a method that allows everybody to contribute at the same time.
- Because the client is participating during the interpretation stage, it is important to allow them to feel included with hands-on work—not as merely spectators.

Reveals patterns

- As the research was dealing with multiple user profiles and contexts, it is important to find patterns that will guide the strategy development.
- Majority of the data was purely qualitative; finding patterns among the data allows for an easier big picture interpretation.

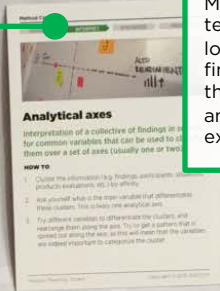
INTERPRET

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection

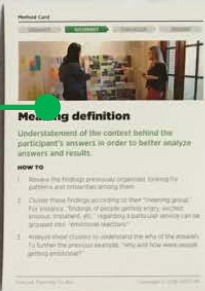
How much this method will address the following criteria during the INTERPRET ?



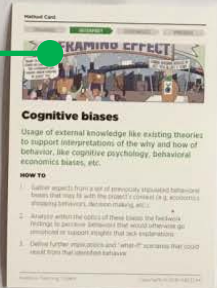
Analytical axis aims to categorize a series of findings but as the project had too many different variables and participants profiles, axis analysis would be too superficial.



Meaning definition techniques may take a long time to synthesize findings, but they prove that all profiles are being analyzed properly to extract behavior patterns.



Cognitive bias studies explore behaviors patterns that are already too broad to be used on the specific user profiles this project had.



The JTBD technique can be better used to focus on one type of product/service usage, but when dealing with a wide range such as on this project, many patterns can pass by unnoticed.

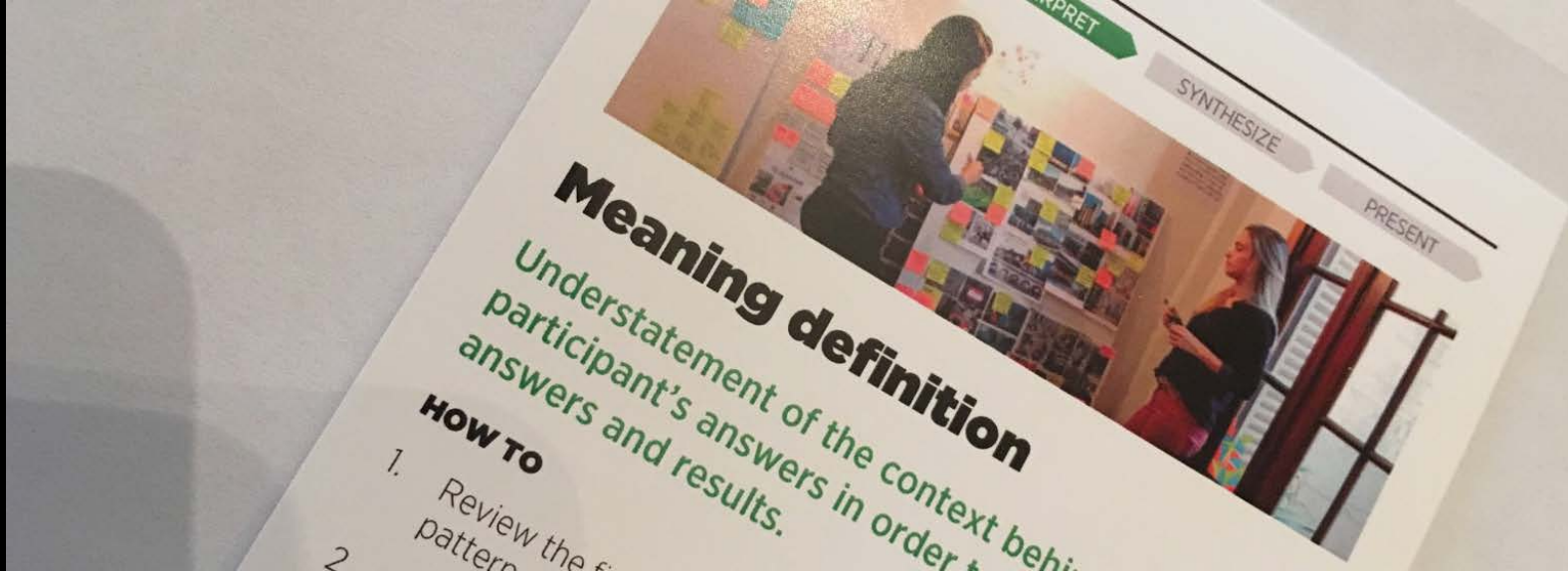


Methods that didn't apply for the project's type of research



INTERPRET

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection



Rational Meaning definition

- Each fieldwork interaction had a large amount of contextual and behavioral information on the organized data, which requires a deep dive on the meanings individually.
- The whole team and clients were working on this stage of analysis, therefore the process had to be very collaborative and argumentative.
- Behavior patterns can be identified per user profile when understanding the meaning of their daily life events, barriers, and motivations in home.

INTERPRET

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection**
Meaning Definition

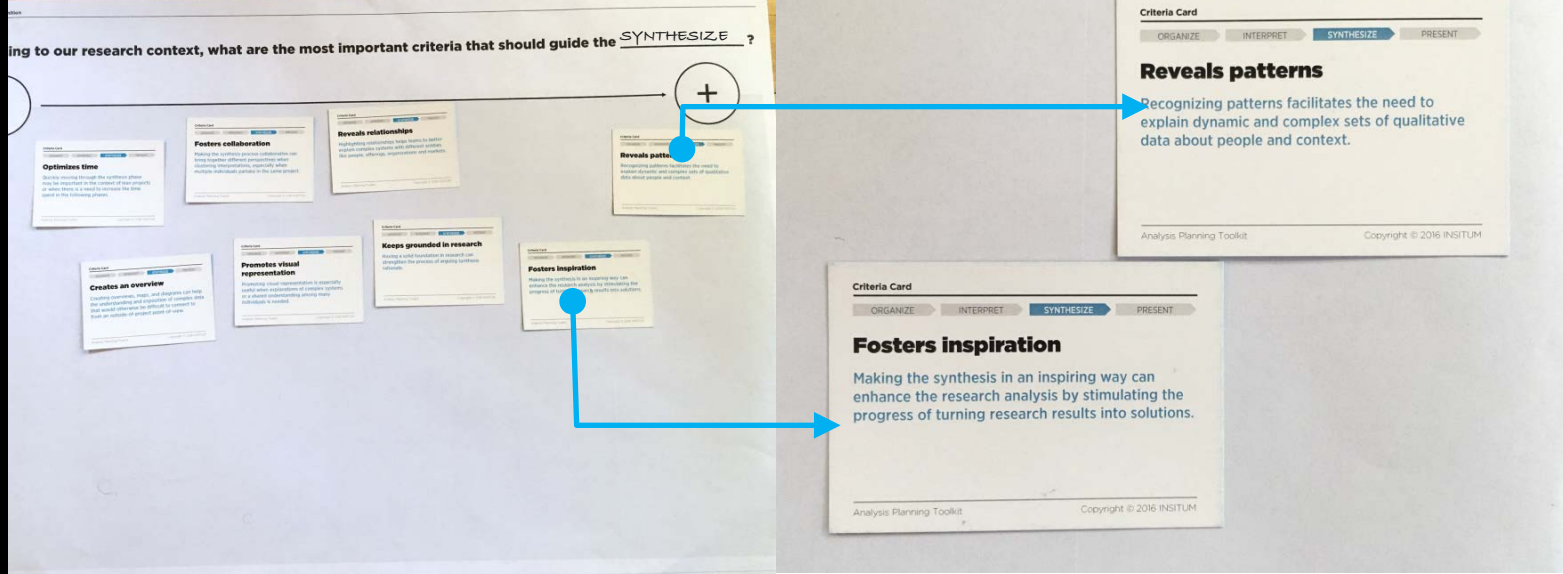


SYNTHESIZE

1 - Criteria selection

2 - Methods mapping

3 - Methods selection



Rational Reveals patterns

- Research results aimed to identify behaviors and drives for a broad market based on the interpretation of multiple user profiles, which required identification of patterns between them.

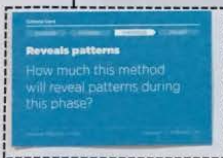
Fosters inspiration

- The research outcome at this point needed a shift from contextual depth to straightforward actionable.
- Project's audience wasn't familiar with qualitative research—results needed to look actionable without requiring a deep dive study.

SYNTHESIZE

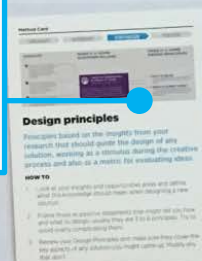
- 1 - Criteria selection
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How much this method will address the following criteria during the SYNTHESIZE ?



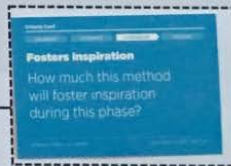
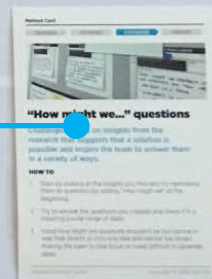
Unless used in addition to another more actionable research-to-solution method, personas can't tangibilize future orientations on their own.

Can be used to tangibilize overall guides for developing solutions for a broad public range.



Provocative questions can lead to inspiring, actionable answers.

More direct and restricted; based on insight rather than an overall guide.



Methods that didn't apply for the project's type of research



SYNTHESIZE

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection



Rational

Design principles + "How might we..." questions

- Design principles define the direction products should follow in future developments in a tangible, yet broad way.
- In order to further inspire the audience and to approach more specific opportunities, "how might we" questions work as a complement of the design principles.
- A design principle consolidates each broad opportunity area, with each main individual opportunity being provoked with a "how might we" question.

SYNTHESIZE

1 - Criteria selection

2 - Methods mapping

3 - Methods selection

Design principles + "How might we..." questions

Opportunity areas summary

SAFETY One of the main concerns Brazilians usually have is regarding safety, especially inside their home boundaries.

QUALITY OF LIFE People's concerns about quality of life extends to present actions and future planning for aspects related to work, family, home, entertainment, health, and food.

CONVENIENCE The city context hinders people's routines—further emphasizing the busyness of their lives. As a result, they outsource household tasks in order to aid their home management.

VERSATILITY Families have in-flux lives, causing their homes to be in constant evolution.

SHARING People must deal with the tension of wishing to use spaces and appliances both individually and collectively.

TAKING BACK THE CONTROL OF HOME

Because the house is permeable, the influence of external agents makes people eager to take back control of the situation, thus aiding to fulfill the desire to revalue their homes.



SYNTHESIZE

1 - Criteria selection

2 - Methods mapping

3 - Methods selection

Design principles
+ "How might we..."
questions

WHY IT HAPPENS

- Kids have become the **most important agent** in a household
- Parents try to **compensate their absence** by closely monitoring their kids
- There are many **uncontrolled sources of information** accessible by children

Household member quotes

"The computer is placed on the corridor so I can see what my stepson does on the internet."

🗨️ Claudia, late parents

"After we installed the cameras to monitor our son during the day, we started trusting her (the nanny) more."

🗨️ Douglas, father who travels frequently

FURTHER EVIDENCES

Market growth of in-home surveillance

Micro-cameras and audio bugs are being sold for parents wanting to **monitor their nannies and maids**.

Source: Hotfrog

Expert quotes

"Parents need to be careful about their children's contact with technology. They need to define the boundaries between entertainment and learning times."

🗨️ Renata, psychologist

"Nowadays, parents are using more technology for monitoring and taking care of their children."

🗨️ Léa, psychologist



SAFETY



PARENTAL CONTROL

- Parents are looking for ways to closely control what their kids are doing.

SYNTHESIZE

1 - Criteria selection

2 - Methods mapping

3 - Methods selection

Design principles
+ "How might we..."
questions



SAFETY

PARENTAL CONTROL

Parents are looking for ways to closely control what their kids are doing.

QUANTITATIVE ANALYSIS

Parents seem more worried about restricting access to content rather than restricting usage of home appliances.

Considering the new family arrangements who had children:

Do you restrict what your kids watch on the TV or the internet?

62%

Do you restrict what your kids can access at home (oven, freezer, etc.)?

37%

SYNTHESIZE

1 - Criteria selection

2 - Methods mapping

3 - Methods selection

Design principles
+ "How might we..."
questions



SAFETY

PARENTAL CONTROL

Parents are looking for ways to closely control what their kids are doing.

QUANTITATIVE ANALYSIS

Parents seem more worried about restricting access to content rather than restricting usage of home appliances.

IMPLICATION

Appliances could improve parents' awareness about their children.



HOME APPLIANCES CHALLENGES

- How can families monitor who and when someone is using the appliances?

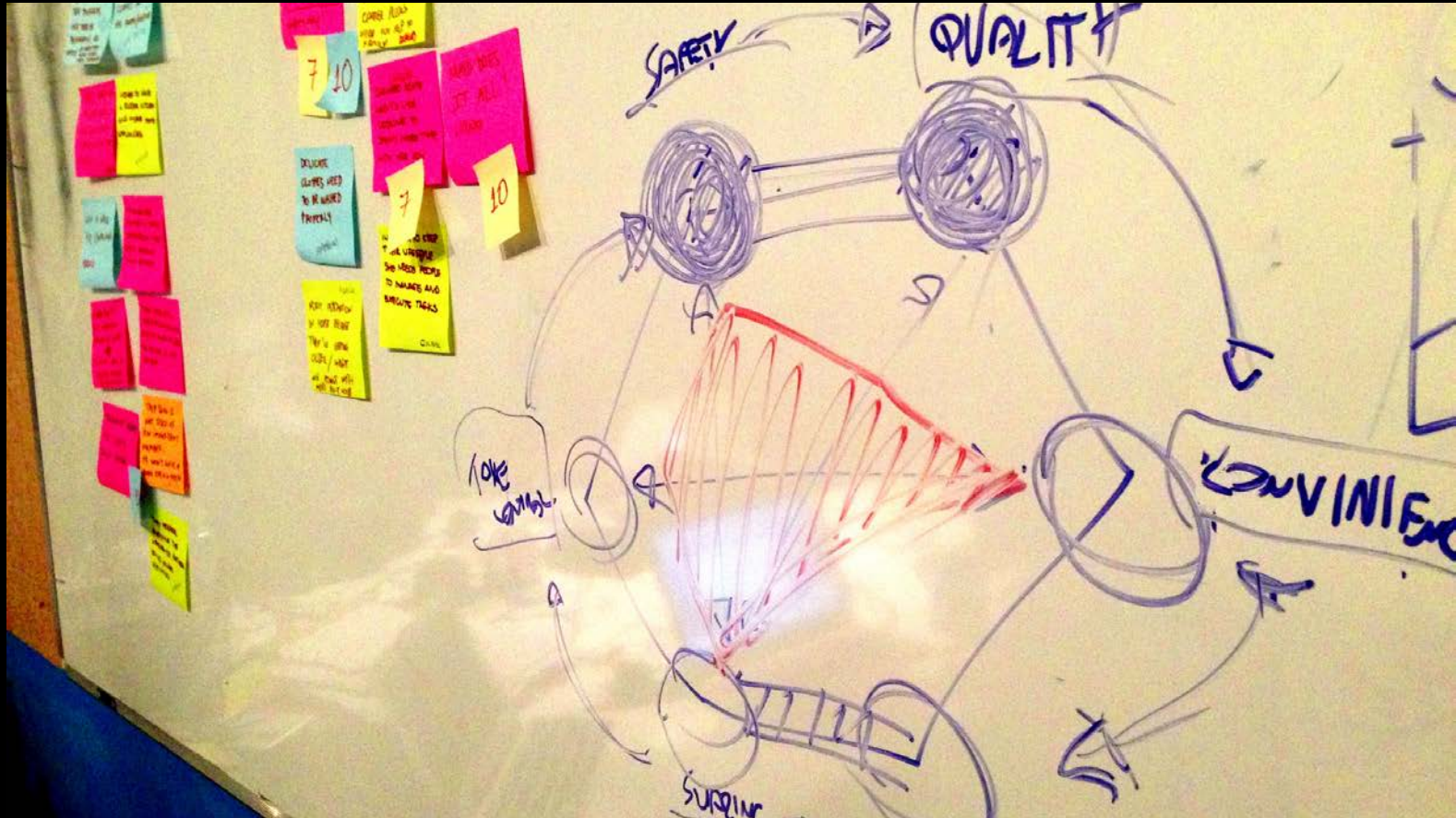


ENTERTAINMENT APPLIANCES CHALLENGES

- How can parents monitor what is being watched on the TV/browsed on the internet while outside?
- How can devices have children-specific preferences that are easily set by parents?
- How can parental control notifications have obtrusiveness preferences?

SYNTHESIZE

- 1 - Criteria selection
 - 2 - Methods mapping
 - 3 - Methods selection
- Design principles
+ "How might we..."
questions

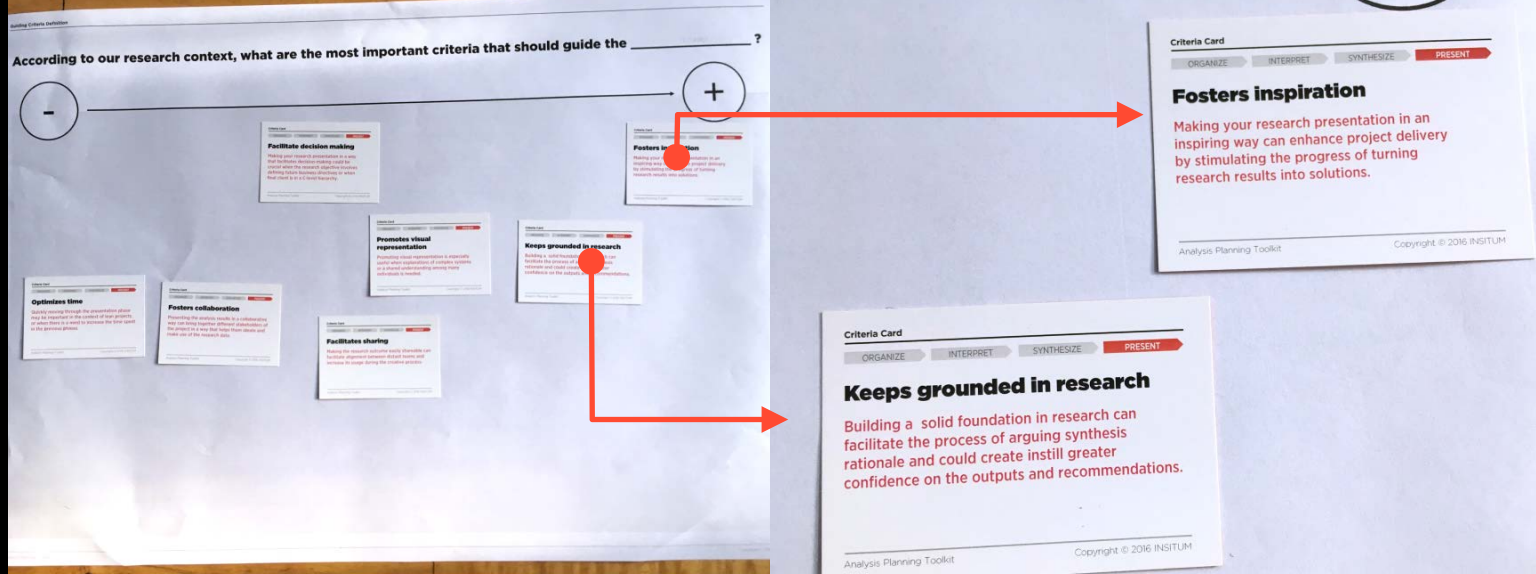


Plan the PRESENT phase.

- Using the context mapping example, prioritize the 2 most important guiding criteria.
- By positioning your chosen criteria cards in your matrix, evaluate different methods and define one (or more) to be used.

PRESENT

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection



Rational

Fosters inspiration

- Main goal of the research presentation was to engage and draw attention of stakeholders who aren't used to qualitative research.
- By fostering inspiration the research can be more effective in tangibilizing results into actionable tools.

Keeps grounded in research

- Considering the client's company background based on results and skeptical or qualitative data alone, a clear showing of research evidence is necessary.
- Addition of quantitative and secondary data can make insights stronger and more reliable.

PRESENT

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection

Methods Evaluation and Definition

How much this m

the following criteria during the

Detailed report

Self-explanatory reports are usually the main source of direct research evidence.

Keeps grounded in research

How much this method will keep it grounded in research during this phase?

Full self explanatory reports are usually the main source of direct research evidence.

These often extensive reports, however, fail to quickly inspire people unfamiliar to the process.

Inspirational posters, insight drops, and executive presentations are usually more appealing to inspiring objectives, but oftentimes the more inspiring they are, the less gross total of research evidence they provide.

Insight drops

Small "self-explanatory" cards with research results sent over time to the audience to facilitate content digestion and constantly foster inspiration within different teams.

Inspirational posters

Posters that should provoke reflective reactions when read. Usually contains insights structured to make the reader think of the subject in a way that may be conflicting with ongoing understandings of the situation.

Executive presentation

Quick and action-oriented presentation to uncover the main findings and the research, increases engagement making from leadership parties on.

Games and toolkits

Tools that encourage reflection on the field research results and facilitate content dissemination by using engaging hands-on activities.

Fosters inspiration

How much this method will foster inspiration during this phase?

Methods that didn't apply for the project's type of research

PRESENT

- 1 - Criteria selection
- 2 - Methods mapping
- 3 - Methods selection



Rational Storytelling animation

- There were no raw recordings of the fieldwork to be used for a documentary video.
- Animations also make it easy for the required quantitative and secondary data the video had to show to properly support the insights for the audience.
- Video short stories are a powerful tool for spreading insight bits around in an inspiring way.

PRESENT

1 - Criteria selection

2 - Methods mapping

3 - Methods selection

Storytelling animation

BRAZILIAN NEW FAMILY ARRANGEMENTS



// Activity #3

Reflection.

- What was the experience of planning the analysis like?
- What value would applying techniques like these bring to your practice?

Thank you.

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