



**Designing Products for G2P recipients
through Financial Diaries and
Ethnographic Research in Brazil**

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Outline

1. G2P and Applied Product Innovation at CGAP
2. Bolsa Familia and the Brazilian Context
3. Financial Diaries and Ethnographic Research Overview
4. Overall Research Insights
5. Behavior Segmentation
6. Diaries and Ethnography as a Methodology for Product Innovation

In the last decade, there has been a large demographic change in Brazil with 28.8 million people moving into the middle class. This growth in the middle class has created incentives for providers to develop new products for this new income segment and those that are not far behind.

However, despite this emerging interest in suitable channels and products for the unbanked, few providers have a contextualized understanding of how middle and low income customers use their money and financial products.

The need to create suitable products and instruments for lower income people is great, but translating consumer insights into successful products is a real challenge.

For this reason, CGAP and Plano CDE embarked on a project undertaking financial diaries & ethnographic research among G2P recipients to help providers design better financial products that meet their needs.



1. G2P and Applied Product Innovation (API) at CGAP

Why G2P?

1

CGAP's G2P work is based on the hypothesis that technology-enabled G2P payments may be leveraged to increase financial inclusion for the poor.

2

New delivery mechanisms have the potential to bring banking services to beneficiaries by ensuring that payments land in accounts which permit recipients to save and make transactions.

Why API?

1

Approaching financial services from the supply side is not enough.

2

Low-income segments are difficult to serve for established providers.

3

Understanding customers is proven to work.

2. Bolsa Familia and the Brazilian Context

Bolsa Familia is an innovative G2P initiative started by the Brazilian Government in 2003. It reaches 13 million households, more than 46 million people, a major portion of the country's low-income population.

- Poor families with children receive an average of R\$70.00 (about US\$35) in direct transfers. In return, they commit to keeping their children in school and taking them for regular health checks.



Bolsa Família has had two important results:

1. Help reduce current poverty,
2. Encouraged families to invest in their children, thus breaking the cycle of intergenerational transmission and reducing future poverty.

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3. Overview

Financial Diaries & Ethnographic Research

Methodology Used for the Research: Financial Diaries and Ethnographic Interviews

For this project we used a mixed methodology:
Financial Diaries + Ethnographic interviews

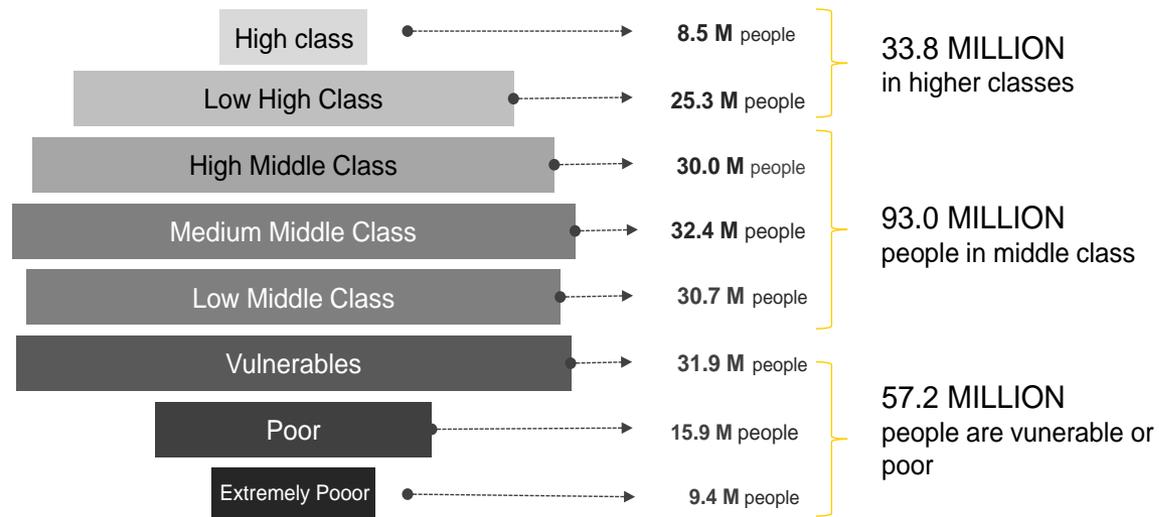
- **Financial Diaries**: combine econometric data about the household budget (inputs and outputs flow) to measure changes in household assets
- **Ethnography**: contextualize the social dynamics experienced in the home and in the community. Helps to differentiate between what people say and what people actually do because many of the small financial transactions are not counted or are not considered in the written financial diaries

Good mix: Financial diaries give us important insights into income level, income seasonality, and income composition, and perhaps into budgeting capabilities. Ethnography provides product designers with insights for product features.

Who Makes up our Sample?

Economic Classification Criteria In Brazil

128 MILLION PEOPLE belong to CDE social classes (66%) or 2 in every 3 Brazilians



BRAZILIAN POPULATION 195 million people*

Who Makes up our Sample?



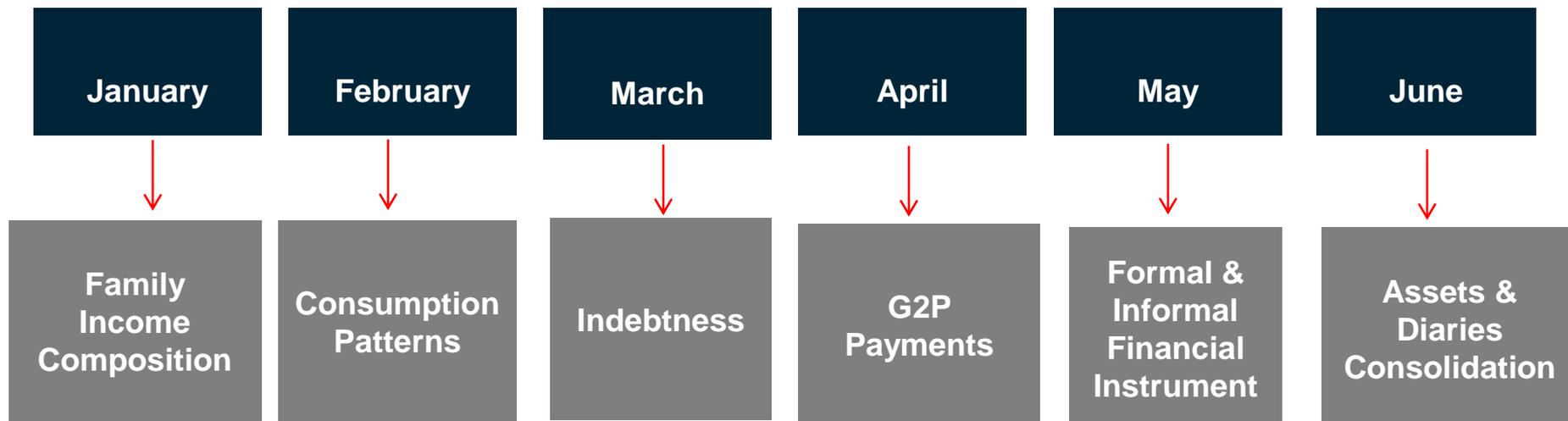
The study is the result of 6 months of research from January to June 2013 with 123 families. Each family was visited an average of 8 times and each visit was 2 hours long. The sample consisted of 86.9% of people who belong to the following income segments:

SAE Criterion	Per capita monthly family income
Vulnerable (C2)	R\$163 to R\$291
Poor (D)	R\$82 to R\$162
Extremely (Poor E)	Up to R\$81

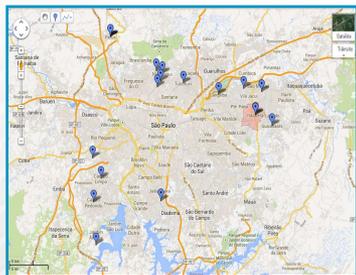
The sample also included 13.1% of people belonging to low and average middle class. (B1, B2, C1)

Six Months of Financial Diaries and Ethnographic Interviews

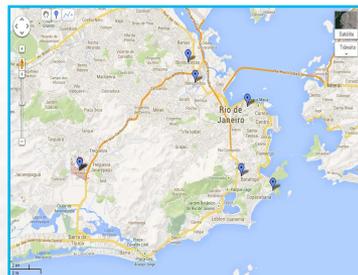
2013: Each month focused on a specific aspect of household finances



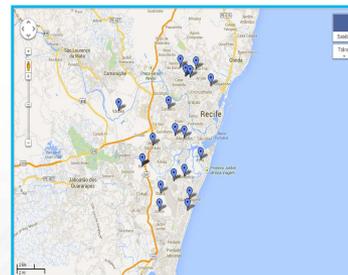
São Paulo



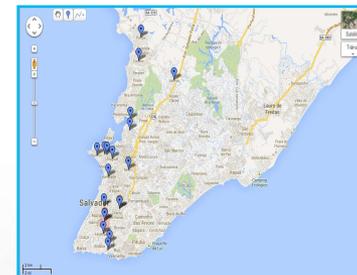
Rio de Janeiro



Recife



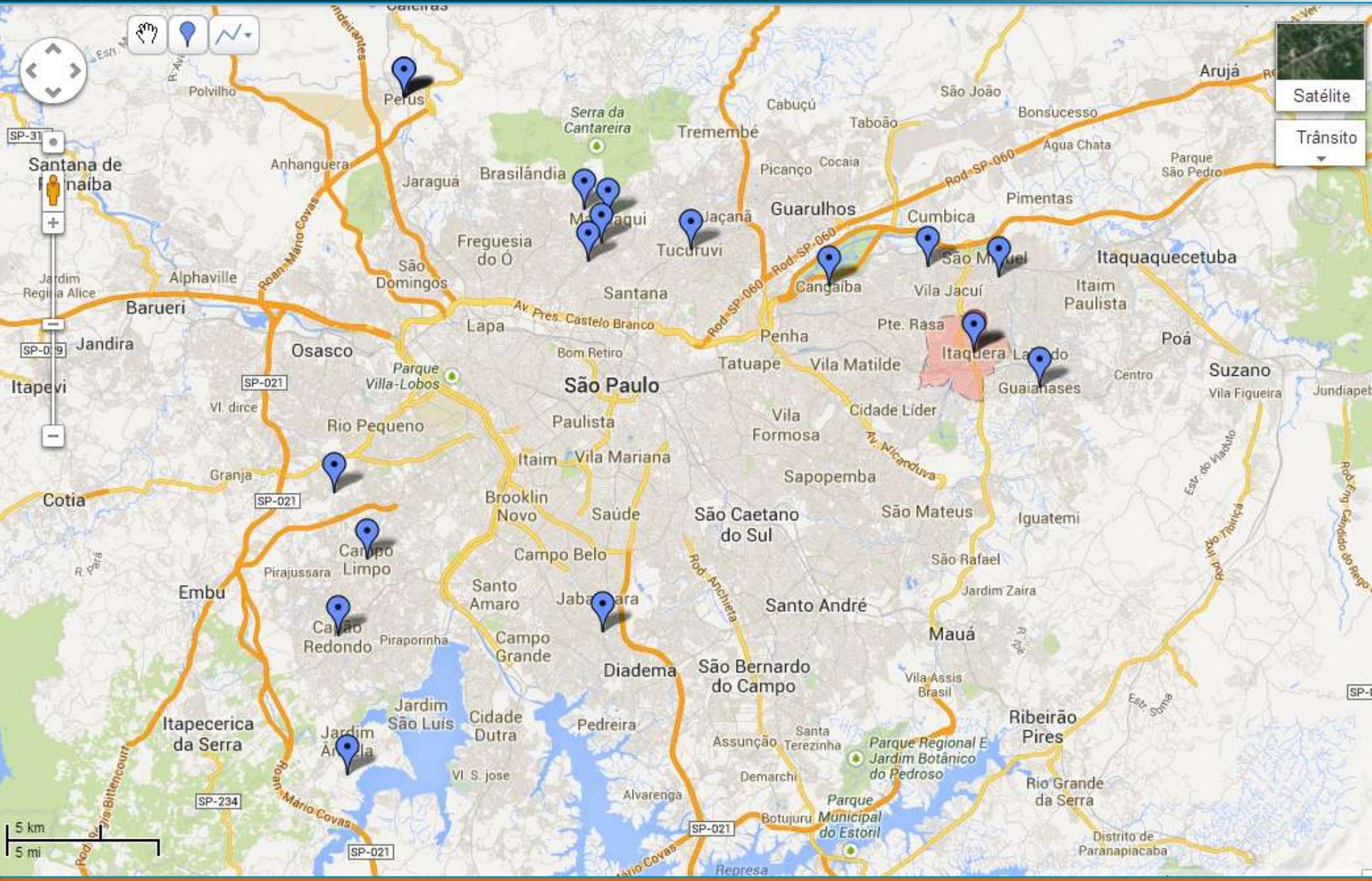
Salvador



1107 interviews in 4 locations

São Paulo

Site Locations



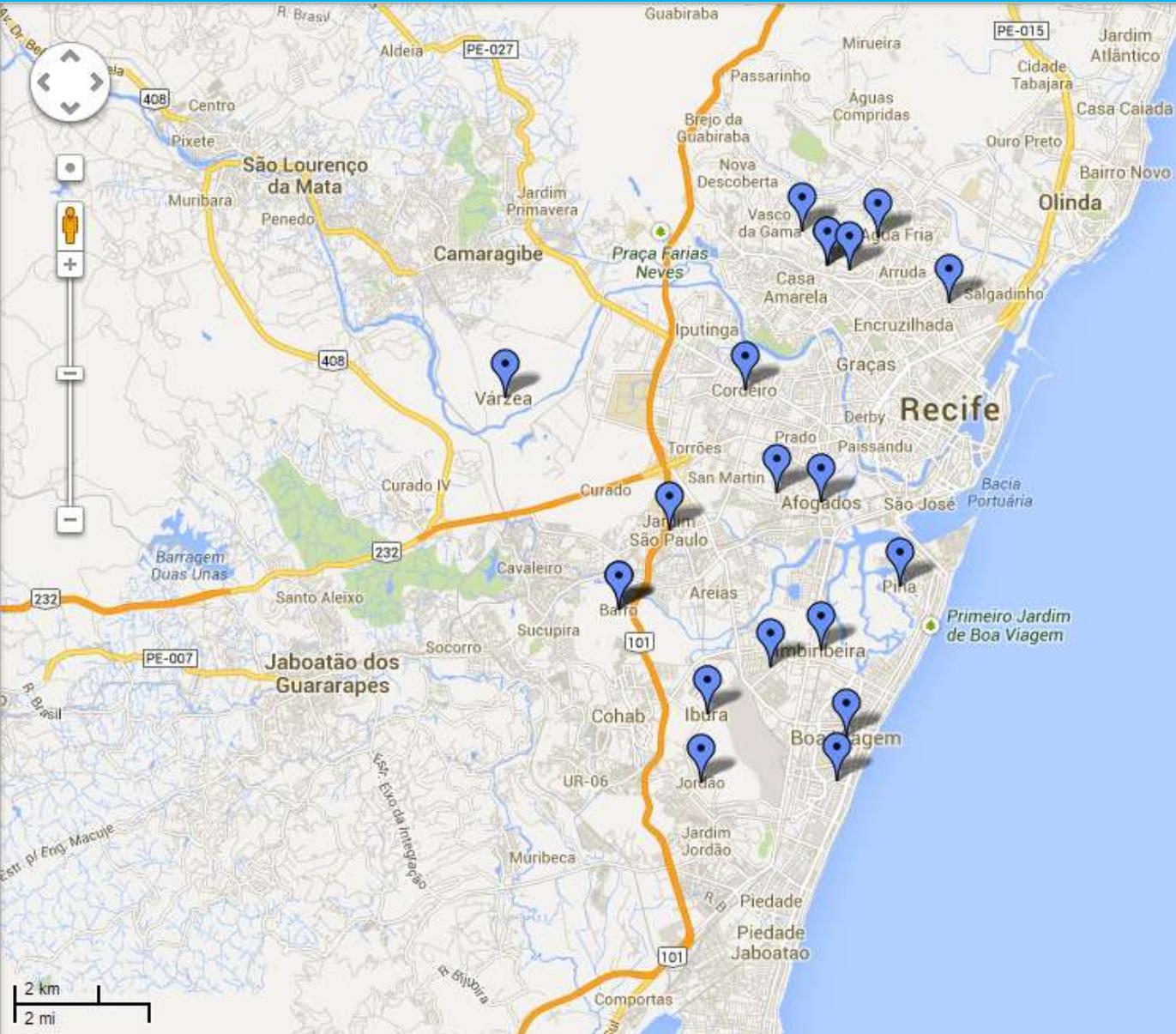
Rio de Janeiro

Site Locations



Recife

Site Locations

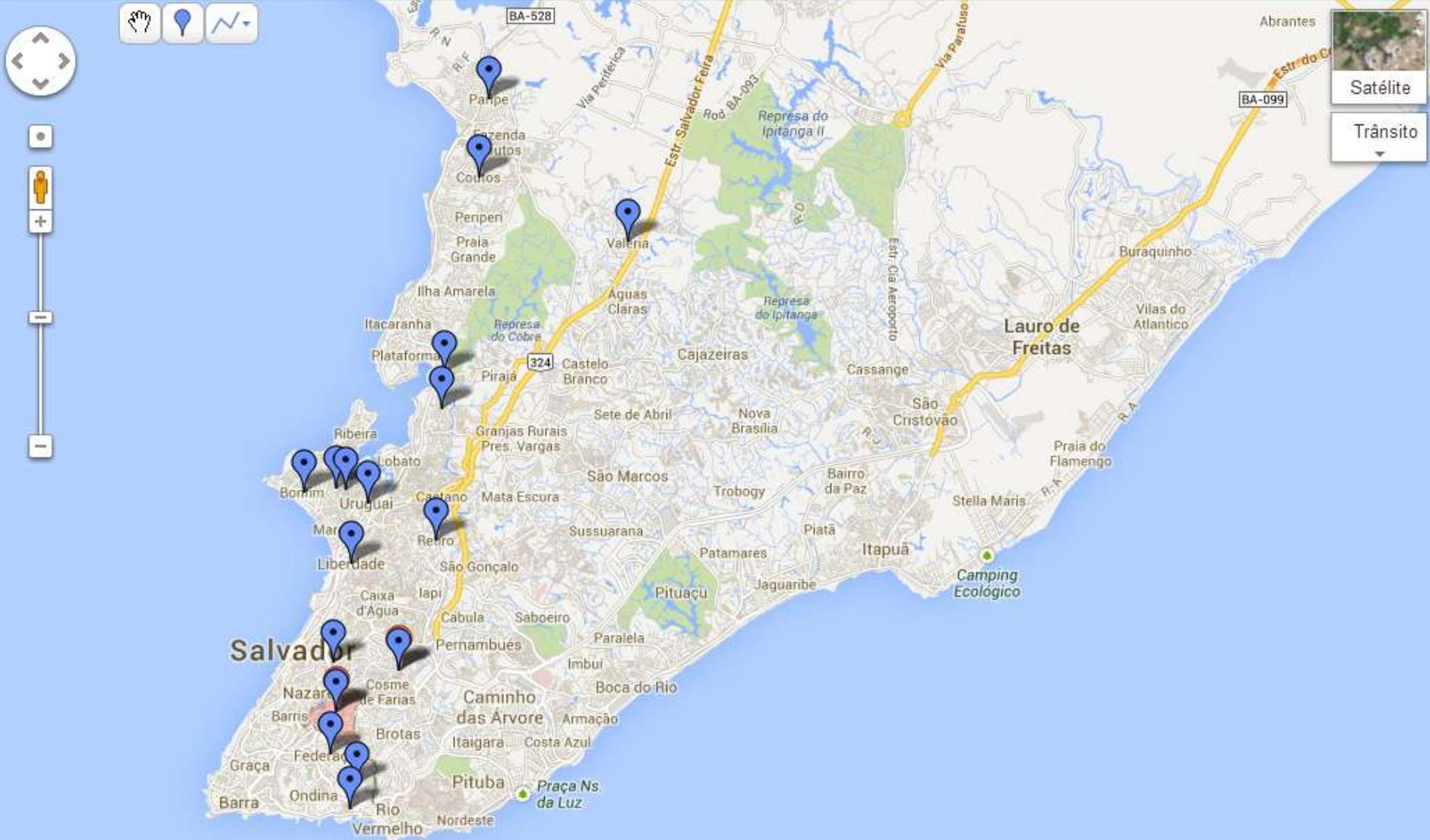


Satélite

Trânsito

Salvador

Site Locations



2 km
2 mi



4. Overall Insights

Financial Diaries and Ethnographic Interviews

How do we translate Ethno-Diary information into product concepts and features?

1

Summarize product-relevant ethno-diary learnings/insights

Ex. of a learning: Some families live primarily from one-off jobs (called “*bicos*” in Portuguese)



2

Identify segment needs & determine design principles

Ex. of identified need: Families have irregular income & would need flexible payment arrangements or flexible income requirements.



3

Translate identified needs into product features using design principles

Ex. of a need translated: “Design-your-own installment plans.” Recommendations are granted based on situation.

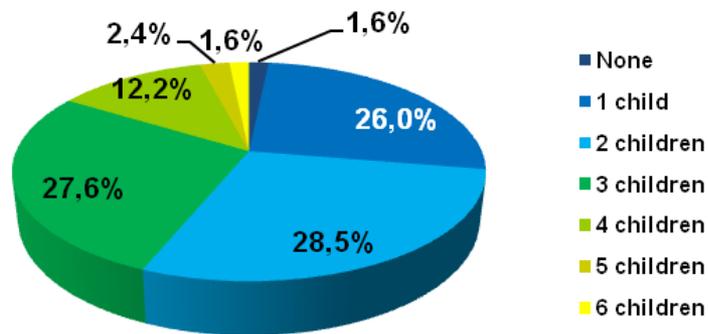
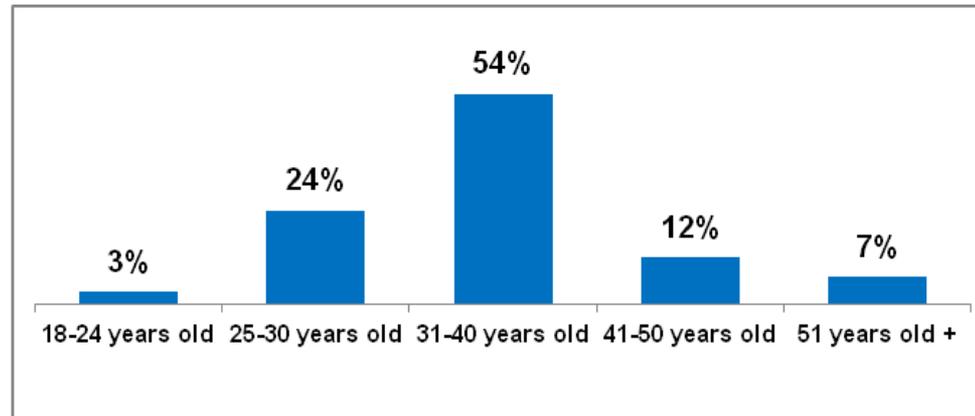
Let’s now summarize the insights that came out of the research...

Sociodemographic profile of the sample

INSIGHT: 55% of social benefit recipient households are headed by working-age single mothers.

- 78% are women between 25 and 40 years old.
- They are working age, but have a hard time accessing the formal labor market.

Age Range



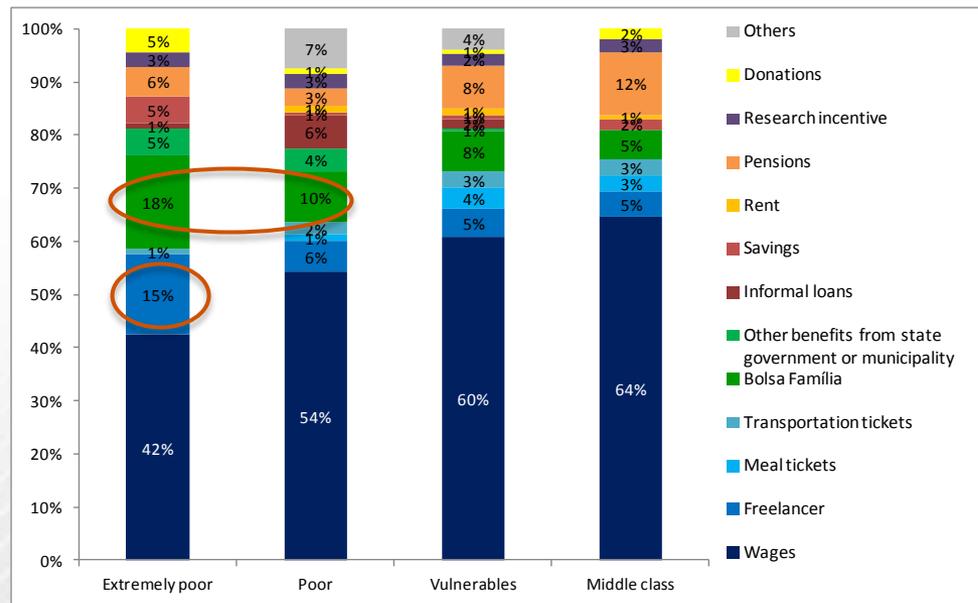
- 98.4% have children. 72.4% have more than one child.
- Most households are headed by single women who receive no contribution from ex-husbands, partners or from the children's father. Most men don't provide financial or emotional support for the children.

Budget composition

INSIGHT:

One-off jobs (*bicos*) and informal employment activities are very prominent, particularly among the extremely poor.

- The composition of the family budget reflects the income level of the families:
 - Among the extremely poor, G2P benefits make up nearly 23% of the income, a proportion that decreases as the income increases.
- The type of income generation activity also presents important variations:
 - Among the extremely poor and poor, freelance activities are prominent, and among the vulnerable and middle-class, wages (formal or informal) represent the greatest portion of income.

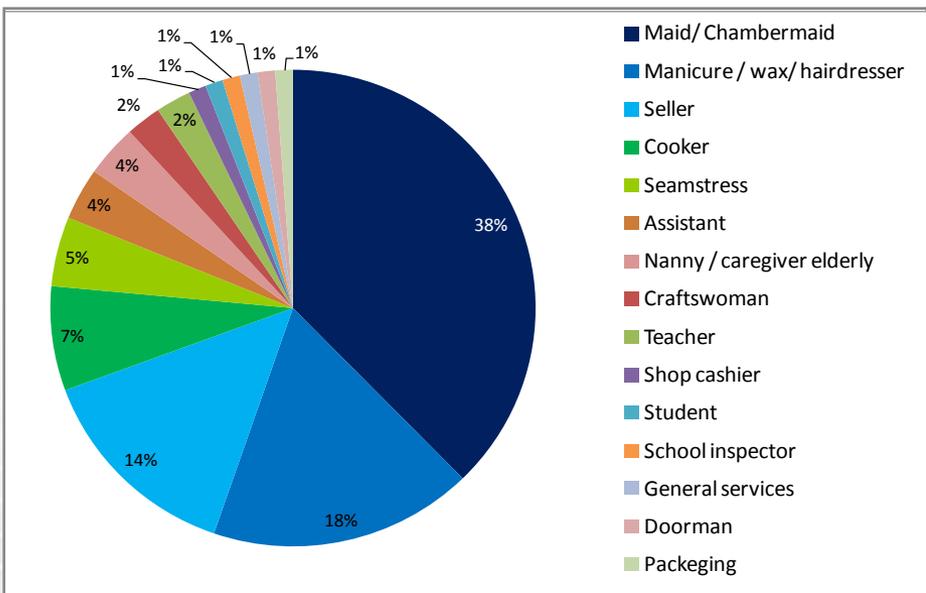


Note: Wages in graph include both formal and informal wages. The vast majority are informal.

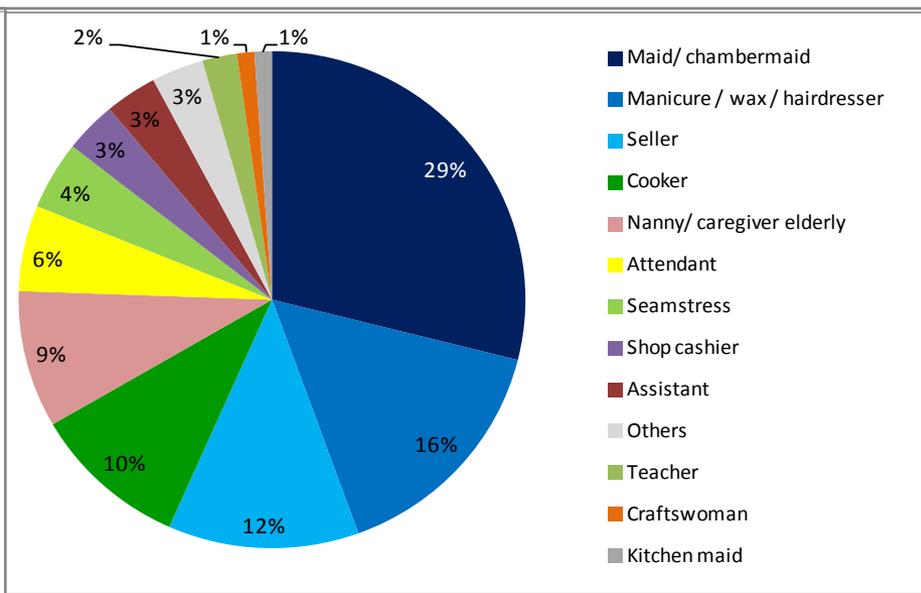
Changes in employment activities

INSIGHT: Only 5-20% of women are formally employed*

- Abrupt changes among the sample in terms of their activities and employment from month to month reflects their vulnerability when it comes to job security.
- In June 2013, 85 women were working: 67 women had informal jobs and only 17 women had formal contracts. From December 2012 to June 2013 formal jobs increased from 5% to 20%.



Activity or employment in December (%)



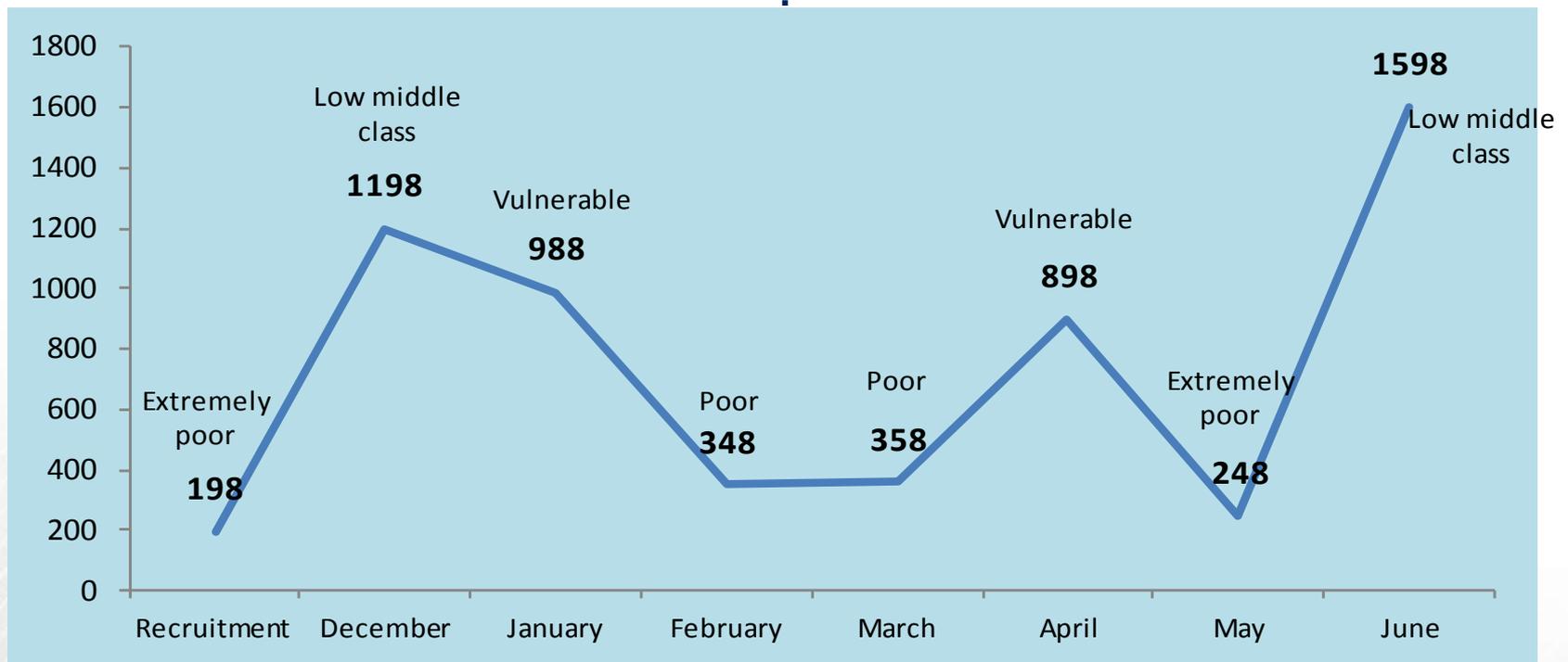
Activity or employment in June (%)

Budget inflow fluctuations

INSIGHT:

One month a family is classified as extremely poor, the next, as low middle-class.

- This family was categorized in four different income levels over a six-month period: extremely poor, poor, vulnerable and low middle class.
- This income volatility is present in many of the families surveyed and is one of the specific characteristics of the target population studied.



Inflow variation over time (in Reais)

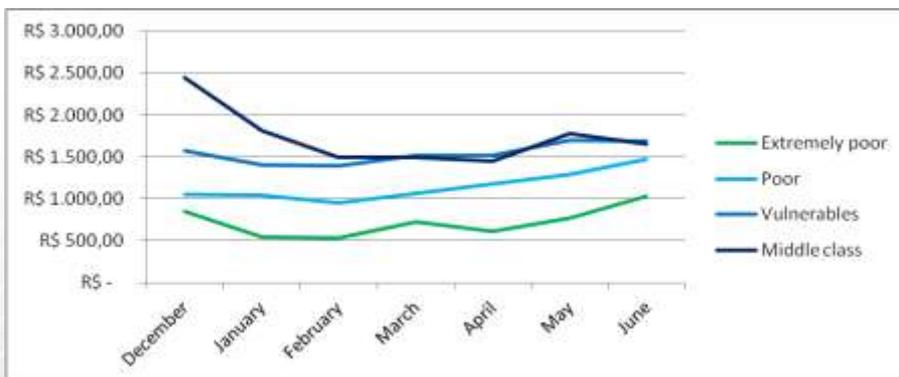
Seasonality of budget inflows and outflows

INSIGHT:

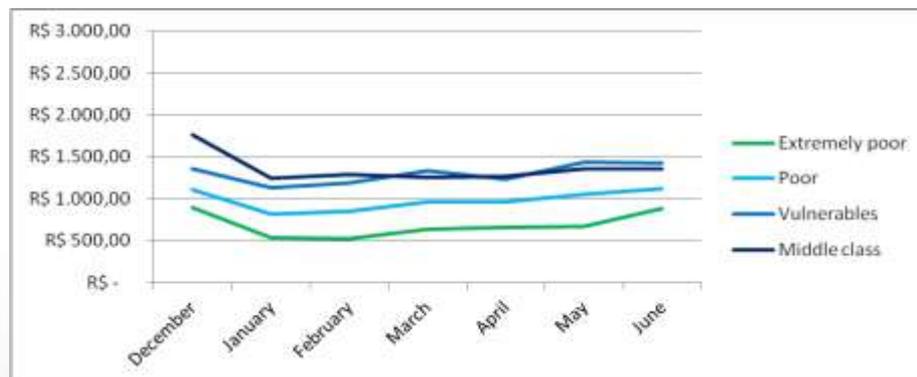
Middle-class families, and not the poorest, experience the greatest budget fluctuations.

- The seasonality of the budget is a reality that has great impact on the family budget for all income profiles. However, when we observe very closely the daily financial data, **the greatest income fluctuation can be perceived among middle-class families and not among the poorest.**
- Due to the unpredictability of one-off jobs (*bicos*) and to increase the chances for backup informal work, the poor work hard on maintaining and strengthening their social network. **This may explain why the poorest segment manage to control income fluctuations better.**
- The number of unpaid or late bills greatly increase in January.

Total Inflows average – Dec-June per income class



Total Outflows average – Dec-Jun per income Class



Base: Extremely poor: 18/ Poor: 39/ Vulnerable: 50/ Middle-class: 18

The role G2P benefits play in the family budget

INSIGHT: 35% rely heavily on social benefits to make ends meet, while 50% use it to complement their income. 15% spend it exclusively on children.

- The role of the social benefit goes beyond food safety. It contributes to the psychological well-being of households.
- Households know they can count on the monthly extra cash from the government.
- It provides them with a sense of women empowerment as they can decide what to do with the cash.

Benefit as main source of income:

Benefit's role	Main use	Family structure
1) Main source of income	Main entry of the month to pay for food, and housing	Female heads who don't have specific income, depend on freelances or are unemployed
2) Ensures essential goods	Provide access to essential goods: food, housing or debt payments	Single women with kids, dependent on freelances. Or women with partner that is unemployed or in the informal market.

Benefit as a complement to income:

Benefit's role	Main use	Family structure
1) Ensures food and covers unexpected events	Allows better food purchases or pays unexpected bills	One family member has formal work.
2) Aimed at the children	Overall kid's life improvement through better food or school items	Some family members have formal work
3) Diversified use	Complements regular income, use depends on family circumstances	Families with regular financial inflows.

Social Benefit playing a structural role in the family budget

Karina lives in Rio de Janeiro, has 3 kids, is 25 and a widow. The social benefit is essential to maintain the family's standard of living and to pay the bills. In December 2012, the benefit was her only income.

Her financial diary makes clear how relatives and acquaintances' contributions are an important safety net. In March, Karina started an informal job adding R\$600 a month to her total inflows. This helped her be cash-flow positive in April.

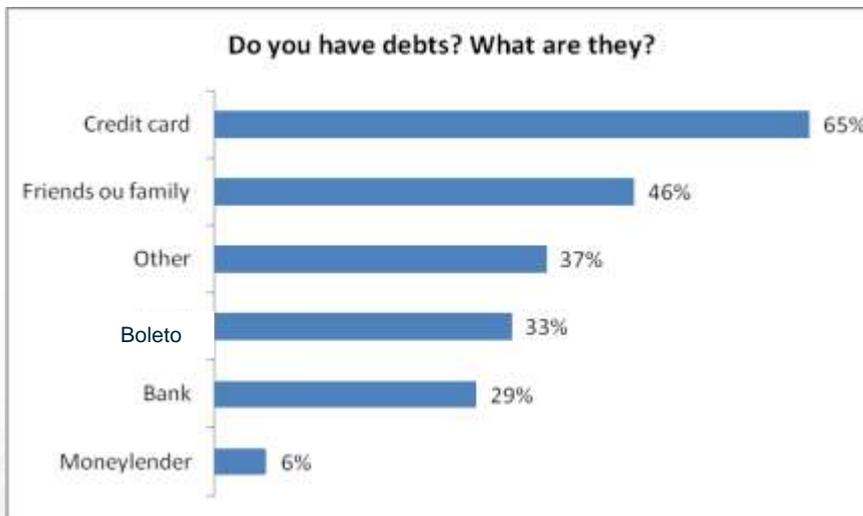
Karina – RJ (In R\$)		December	January	February	March	April	May	June
INFLOWS	Salary	0	0	0	600	600	600	600
	Transport ticket	-	-	-	-	-	60	-
	Social benefit	164	165	365	166	166	166	166
	Taken from savings	-	-	-	-	-	70	50
	Survey incentive	-	50	100	100	100	50	50
	Help from mother	180	-	285	125	-	-	-
	Help from an acquaintance	200	350	-	-	-	-	-
SUBTOTAL		544	565	750	991	866	946	866
OUTFLOWS	Housing rent	180	250	250	250	250	250	250
	Public services	65	110	61	63	118	68	106
	Transportation	-	-	-	25	-	-	6,4
	Groceries	320	100	270	260	280	275	220
	Other purchases	100	-	-	140	-	150	300
	Education	-	-	-	225	-	-	-
	Eating out/leisure	20	20	-	200	-	50	-
	Loan payment	50	-	-	-	-	100	60
	Savings	20	50	-	-	100	-	-
	Other expenses	-	50	360	-	-	-	-
SUBTOTAL		755	580	941	1,163	748	893	942
TOTAL		-211	-15	-191	-172	118	53	-76.4

Indebtedness

INSIGHT:

Highly credit-driven culture. Consumption and present value of money are KING.

- Common features under indebtedness: i) lack of regular income, ii) financial disorganization, iii) debt bills responsible under a 3rd party; iv) misuse of financial tools
- Debt drivers: furniture purchases, building materials, borrowing informally to pay other debts, accumulated debt on credit cards
- Consumption means independence, even if the cost is to be indebted.



→ For consumer good; often borrow a 3rd party's credit card

→ For minor expenses & maintenance

→ Use formal tools when approved

→ Go to bank for larger amounts

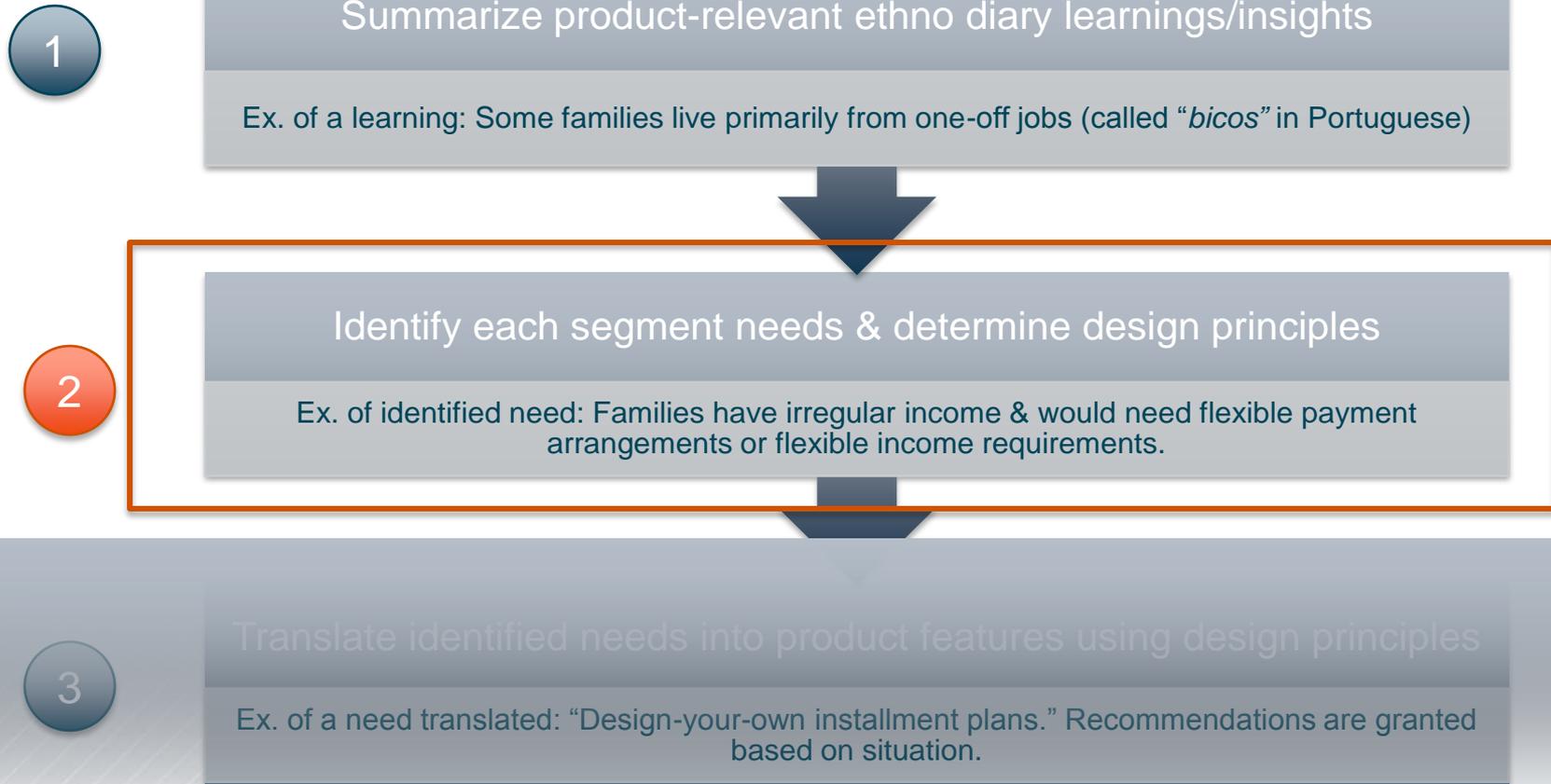
→ For emergencies



5. Behavior Segmentation

Using Financial Diary and Ethnographic Interview Insights

How do we translate Ethno-Diary information into product concepts and features?



Let’s look at the segments that emerged from the research ...

Household segmentation according to financial behaviors

Households were segmented around 3 different financial behaviors: those related to 1) budgeting, 2) consumption and 3) indebtedness. Three different segments/profiles emerged under each behavior studied.

1. Related to Budgeting

- Profile 1a – Disorganized
- Profile 1b – Organized
- Profile 1c – Driven by debt

2. Related to Consumption

- Profile 2 a – Down-to-earth
- Profile 2 b – Planner
- Profile 2 c – Consumer

3. Related to Indebtedness

- Profile 3 a – Temporarily indebted
- Profile 3 b – Always indebted
- Profile 3 c – Averse to debt

Details of Segmentation 1: Related to Budgeting

January discussions show 3 different profiles based on budget patterns

Profile 1A: Disorganized



- No planning; late bills are common
- Used to borrowing credit card from others
- Have a hard time saving
- *Aline is 33, 3 kids, has informal job. She budgets intuitively and doesn't keep track of expenses, so usually asks for financial help from her parents.*

Profile 1b: Organized



- Keep track of inflows and outflows; avoid risks
- Expenses controlled according to priorities
- Afraid of loans & credit cards; save monthly
- *Romilda is 47, 3 kids. Main income comes from her mother's pension. She never finished school and left her cleaning job to look after the kids and ill mother.*

Profile 1c: Driven by debt



- Focus on paying bills or moneylender to further redistribute what is left
- High consumption
- *Maria Rita lives in Salvador, is 49, married, 3 kids and sells cosmetics. She is on the black list and pays R\$50 every day to local moneylender.*

Design principles that capture segment's needs

Emergency cash relief
Few formal requirements
Build savings behavior

Simple language
Automatic savings
Build trust

Flexible payments
Context-aware financial support

DRIVEN BY DEBT – Elizabete's story

- Elizabete lives in São Paulo, has no regular job, and depend on a number one-off jobs to survive.
- Elizabete bought a mattress from a salesman who came to her door. She still owes him R\$350. The initial payment arrangement was R\$130 monthly installments. After leaving her formal job to look after her young daughter she asked the salesman to reduce the size of the installments to R\$50 plus pay whenever she has the money.
- She is about to finish paying for a washing machine and decided to buy sneakers from a friend who also sells door-to-door. Elizabete will pay it back in 3 installments of R\$40.
- Elizabete tries her best to pay her debts as soon as money comes in from her art craft sales and from the social benefit. She embroiders baby cloth diapers and receives R\$20 per unit. Even if she makes R\$60 but owes R\$50 to the salesman, the first thing she does is to immediately pay her debts.



Details of Segmentation 2: Related to Consumption

February findings show 3 different approaches to consumption:



Profile 2A: Down-to-earth

Concerned with keeping consumption within their budget

No superfluous spending

Buy only what is really needed

Carmen lives in Rio, is married, 2 kids, family income R\$1,588. She only buys home appliances that are essential and avoids unnecessary food items.

Profile 2B: Planner

Usually plan expenses in order to purchase what they want or need

Outline goals and look out for sales

Save on food purchases to buy appliances

Auxiliadora lives in Recife, is 35, 4 kids. She likes to buy but is aware of her limit. She has no credit card debt and buys one thing at a time, preferring cash.



Profile 2C: Consumer

Consume for pleasure, shop for fulfillment, uncontrolled spending

Often purchase products that are not needed but bring temporary satisfaction

Valdimeire lives in São Paulo, is 25, married, 1 kid. She likes shopping no matter the product. Buying something means she has money.

Design principles that capture segment's needs

Seamless automatic savings

Effective product communication

Smart consumption

PLANNER – Marcia's story

- Marcia lives in São Paulo and considers food products essential to family survival, and durable goods assume a dual role of need and comfort. Luxury is not part of her life priorities.
- Marcia has internet, telephone and cable television as a way to keep her children indoors and monitor the programs they watch.
- Both she and her husband work and decided to open a saving account for each child. They make a constant effort to deposit little by little and understand that savings will play an important role in her children's life. It is '*an incentive for the children to feel more responsible*'.



Details of Segmentation 3: Related to Debt

March and April discussions show different profiles based on main reasons for going into debt:

Profile 3A: Temporarily indebted

Momentary debt needed to buy food for family or emergencies

Waldenice lives in Recife. She got into debt because she needed to buy food for the family. She uses her credit card to buy in installments. Sometimes she borrows money from friends and pays it back with interest.



Profile 3B: Always indebted

Excess consumption desires that snowball into debt

Repeated attempts to repay debt for getting a new loan

Aline is from Rio and has 2 loans: one with a friend and the other with a moneylender. Her bank loan was used to repay the moneylender and buy essential home items.



Profile 3C: Averse to debt

Fear of debt and fear they are unable to access credit products

Cristiane is from São Paulo and is a careful consumer. She doesn't want a credit card or any other installment instrument in order to avoid the snowball effect.



Design principles that capture segment's needs

Emergency cash relief

Context-aware financial support

Effective product communication

ALWAYS INDEBTED – Aline's story

- Aline lives in Rio de Janeiro and has a hard time getting out of the snowball effect. She relies on her friends and relatives for emergency loans, often uses third parties credit cards and is unable to save.
- She's made repeated attempts to repay a debt, often resorting to new ones. Aline took R\$1,000 from a moneylender. Afterwards took R\$6,000 from a bank using her sister's name. She is black listed, hence not eligible for new loans. The bank loan must be paid in monthly installments of R\$200.
- The bank loan was not only used to pay half of her debt with the moneylender but also to buy home items such as furniture and appliances. *'I paid half of the debt with the moneylender and now I can slowly pay him the R\$700 left. This was the only option I had to pay him'.*



How do we translate Ethno-Diary information into product concepts and features?

1

Summarize product-relevant ethno-diary learnings/insights

Ex. of a learning: Some families live primarily from one-off jobs (called “*bicos*” in Portuguese)



2

Identify each segment needs & determine design principles

Ex. of identified need: Families have irregular income & would need flexible payment arrangements or flexible income requirements.



3

Translate identified needs into product features using design principles

Ex. of a need translated: “Design-your-own installment plans.” Recommendations are granted based on situation.



6. Diaries & Ethnography

A Methodology for Product Innovation

What do Financial Diaries Reveal?

The repeated nature of financial diary interviews reveals:

- The poor are surprisingly active money managers.
- The underserved use a range of informal and formal instruments that they sometimes do not understand.

>> Example: Diaries revealed that people do not really understand certain financial products because they gave different answers to the same question in every interview. Had they only had one chance to interview the person, one would not be able to catch this.

Diaries allow for a deep dive into the use between formal and informal instruments and whether the poor use one over the other. This can reveal whether formal products are fitting certain needs and can reveal gaps as well.

>> Example: Diaries reveal that while informal products are imperfect, they offer flexibility, convenience, and terms that better fit with the earning patterns and financial needs of the market.

Adding Ethnography to Diaries: Segmentation

The diaries methodology can be useful for more traditional income segmentation – yet can give an added layer of seasonality and frequency of income. Ethnographic interviews allow for segmentation according to behaviors:

>> Example, in this project we segmented people according to behaviors. This segmentation was very qualitative so a huge effort had to go into grouping opinions, practices, habits together in order to segment people into behavior segments and then identify correlations or products that might fit with these behaviors.

Once clients have been segmented, one can more easily identify needs of different groups, and derive product insights from these different needs.

>> Example: For people with fluctuating income, repayment schedules should be flexible, or savings products should be linked to short term emergency loans when needed.

Diaries & Ethnography: Product Innovation

In diaries, data inquiry is constrained to the questions in the questionnaire. There is not much flexibility with what is being asked, so some instruments and behaviors may be missed.

>> In this project, ethnographic interviews were interwoven throughout which led to much deeper behavioral information and allowed us to test product ideas.

Diaries reveal the seasonality and frequency of income because it tracks inflows and outflows over a period of time. It can allow for a better product fit in terms of seasonality or income consumption.

>> Example: Diaries uncovered that everyone had little money in January and many were late on their bills the prior month given Christmas time. In Income volatility is high- one month a family is middle class, the next month it is vulnerable.

Diaries reveal what people actually do instead of what they say they do

Financial Diaries alone: Pros

- If data is cut correctly it can point out gaps in product offerings or can point out biggest challenge in money management for people.

>> Example: Composition of outflows and inflows can reveal how people manage and use money. Perhaps they are using informal loans to buy food (when they could save for this). So it reveals when wrong products are used for the wrong purposes.

- The extended nature of the interviews also help capture cultural seasonal ups and downs in terms of inflows and outflows.
- The large sample provides the ability to segment groups of people by different variables.
- In our Ethno diaries there was a lot of rich information that came out of deep dive interviews. This information is essential for product innovation.
- Diaries have a higher methodological rigor and could allow for comparability and consistency across interviewees. If ethnographic interviews are not carried out consistently, this could affect rigor.

Financial Diaries alone: Cons

- Financial diaries themselves don't quite get at people's dreams and wants the way that deep dives do (yet if combined with more qualitative methodologies (such as ethnographic interviews), it can serve as a powerful tool).
- Hard to map out the customer experience. Good for initial fact-finding, yet methodology might not reveal more than financial transactions.
- Should be complemented with other deeper dives to understand people more and the motivations behind their behavior.

>> Example: In this case, we combined the financial diaries with ethnographic interviews, giving us a richer picture. That said, it was difficult to segment people into behavior segments because answers are very qualitative. Thus qualitative data can be time consuming to categorize and it can be an art and not a science. Yet the richness of this information can yield many product insights.

The Brazil Financial Diaries project has given us important insights into the income levels, income seasonality, and income composition of G2P recipients in Brazil. By using a mix of ethnographic tools and Financial Diaries, the team was able to take a deeper dive into the financial lives of low-income Brazilians. This led the team to better insights which translated into innovative product features. However, the access to suitable financial products and services amongst the C,D,E class is just part of the solution. While low-income clients know how to choose and use the right products according to the needs, it is essential that providers help in improving communications to their clients about the right mix of financial products and services in order to ensure a sustainable increase of standard of living.

“Sometimes we need friends. Sometimes they need us”...“If a financial help is needed, one helps the other.”
(Financial Diaries participants in Salvador and Recife)



Advancing financial inclusion to improve the lives of the poor

