Financial Data Collection Through Interactive Mobile Phone Podcasts

Social Impact Case Study

Project Partner

Project Funded By

Note: Interactive pdf. Best viewed using Adobe Reader.
Language, literacy, and connectivity barriers stop more than 700 million people in India from accessing timely and relevant information.

In India, the hurdles to deliver financial products and services to low-income and rural populations are many—regulatory, geographic, socio-cultural, and infrastructural. Awaaz.De believes that only qualitative and quantitative data derived after studying these populations can help stakeholders in formulating informed interventions and help businesses, governmental organisations and non-profits understand the various barriers to adoption of financial services at last mile.

To understand the important barriers and opportunities of this segment, we extended our rigorously evaluated Interactive Voice Response (IVR) platform to the Ahmedabad-based cooperative bank Saath Savings and Credit Cooperative Society (also known as ‘Saath’). Saath’s model is member-based and savings driven. A potential member of the Saath Co-operative pays a nominal fee to purchase four shares and becomes its shareholder. Saving is mandatory for every member. To ensure regular savings, Saath’s field officers make regular follow-ups with all the members.

After understanding Saath’s behaviour change of their customers from low savings to increased savings, we created a stream of mobile podcast episodes focused on financial literacy which was produced and later broadcast to over 19,000 Saath customers. This project was supported through a 100,000 USD Grand Challenges Explorations grant Awaaz.De received from Bill & Melinda Gates Foundation.

1. According to TRAI, only 27.3% of one billion mobile subscribers in India use a smartphone. This leaves more than 700 million people from India with access to only a basic feature phone.
2. See figure 1, page 2, to understand the Awaaz.De Approach.
Methodology

In order to optimize content design for high engagement and response rates, we conducted in-person focus group discussions with Saath customers and ran four test calls to 150 individuals across three branches to gauge feasibility, topics of interest, appropriate times to reach listeners, and language compatibility.

We also conducted ‘A/B tests’ on various call design parameters such as call timing, question placement, content length, language, content type and voice. Key findings were: colloquial Gujarati was widely understood in all target geographies, recipients receiving shorter (<1.5 minutes) content were more likely to respond to survey questions, and respondents who received questions earlier within the podcast showed a statistically significant increase in their likelihood to answer a question.

In addition, we implemented a lottery-based incentives approach to elicit higher response rates. Recipients who completed each short, touch-tone survey were entered into a lottery for a chance to win 100 INR prepaid airtime recharge. On average, the response rate range for the incentivized group over 3 episodes was higher (14-18%) than the control (8-10%).

We segmented Saath’s 19,000+ customers into 12 groups based on their characteristics and product subscriptions. We then determined the type of information sought from them such as: motivation for new product adoption, barriers to product adoption, financial behaviours, and perceptions on savings.

Figure 1

OUR APPROACH

1. Design
   Needs assessment, demographic and psychographic profiling, and customer segmentation.

2. Creation
   Story-based content scripting, recording with multiple voice-over artistes in local language, and sound design.

3. Delivery
   IVR delivery by out-bound or in-bound calls and touch-tone response data collection.

4. Analysis
   Call performance data analysis: call pick-ups, connection duration, response rate and custom reports.
Taking into consideration the inquiry areas and segment profiles, we scripted and produced 41 customised, studio-recorded, edu-tainment podcasts in Gujarati—the local language of the customers. The topics ranged from savings and financial planning to information about various financial products and services available to Saath customers.

Each podcast included one to three touch-tone response questions framed so as to gather data on the behaviour of customers towards different financial products, both those offered by and not offered by Saath. After the pilot study, customers were sent interactive, story-based financial literacy podcasts via phone calls over a seven-month period in 2016-2017. 16,949 unique data points were collected from 5,673 individuals. On average, 72% of individuals picked up the calls and completed 69% of the content in each podcast.

**DATA COLLECTION FOCUS**

- Understanding existing financial behavior, motivations, and priorities
- Monitoring perceptions of existing financial services by subscribers and non-subscribers
- Likelihood of adoption of additional products and services (such as mobile money)
- Identifying barriers to new product adoption

Here’s a sample of one of the 41 podcasts. To listen, click [here](#).
SAVINGS AND INVESTMENT BEHAVIOUR

If you had Rs 500 to save/invest every month, what would be your top priority?

- Saving for emergency: 46%
- Saving for special occasion: 17%
- Saving for future business needs: 25%
- Saving for children’s education: 12%

RESULTS

QUESTION 1

Pick-up Rate: 74.3%
Response Rate: 14.2%
Completion Rate: 57.5%

Note: We define ‘pick-up rate’ as the number of individuals who pick-up a call divided by the total number of unique phone numbers targeted. ‘Response rate’ is the number of people who respond to a single survey question divided by the number of picked-up calls. ‘Completion rate’ is the number of users whose call connection duration reaches 100% of the message duration divided by the number of picked-up calls.
**PRODUCT PERCEPTION: FIXED DEPOSIT**

Why did you choose fixed deposits offered over other products offered by Saath?

- All of the above: 45%
- Flexibility to withdraw money before maturity during emergency: 18%
- Had enough money to block for sometime: 18%
- Higher interest rates than other products: 19%

**RESULTS QUESTION 2**

- Pick-up Rate: 77.8%
- Response Rate: 13.2%
- Completion Rate: 68.0%

**Segment** | **Fixed Deposit subscribers**
---|---
Sample Size | 2,715
Format | Question first, followed by content
Content Length | 186 sec.
PRODUCT ADOPTION: RECURRING DEPOSIT (RD)

(A) Would you like a Saath representative to contact you with further details on RD? (For those who responded ‘No’) (B) Why don’t you want to subscribe to RD?

Graphical representation for responses to (B)

- 52% I don’t like locking in money
- 18% None of the above
- 17% I prefer saving in a chit fund or bank more
- 4% Don’t have money every month for extra investment

<table>
<thead>
<tr>
<th>Segment</th>
<th>Non-subscribers of Recurring Deposit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Size</td>
<td>6,000</td>
</tr>
<tr>
<td>Format</td>
<td>(A)/(B) followed by content</td>
</tr>
<tr>
<td>Content Length</td>
<td>208 sec.</td>
</tr>
</tbody>
</table>

30% responded ‘No’ to (A)
What would be the most important benefit of this service (mobile money) for you?

- 43%: Send or receive money straight from my phone
- 31%: Will use it to recharge my prepaid balance and pay bills
- 26%: Will not have to go to a bank for most transactions

**RESULTS**

**QUESTION 4**

**PRODUCT PERCEPTION: MOBILE MONEY**

- **Pick-up Rate**: 72.5%
- **Response Rate**: 6.6%
- **Completion Rate**: 73.2%

**Segment**: 50% of all Saath clients (randomised)

<table>
<thead>
<tr>
<th>Segment</th>
<th>50% of all Saath clients (randomised)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Size</td>
<td>8,311</td>
</tr>
<tr>
<td>Format</td>
<td>Question first, followed by content</td>
</tr>
<tr>
<td>Content Length</td>
<td>225 sec.</td>
</tr>
</tbody>
</table>
Last time we told you about the benefits of using your mobile phone for doing transactions. What do you think might be some of the difficulties for you in using this service?

- I am scared of losing money by making mistakes in transactions (39%)
- I don’t know how to use a smartphone (22%)
- I trust in-person transactions more (20%)
- I don’t have a smartphone (19%)

Results:

- Pick-up Rate: 71.3%
- Response Rate: 8.3%
- Completion Rate: 74.2%

Segment: 50% of all Saath clients (randomised)

- Sample Size: 8,311
- Format: Question first, followed by content
- Content Length: 115 sec.
Conclusion

For financial institutions with large, accurate databases of customer phone numbers, our approach of using interactive, edu-tainment podcasts for data collection is six times more cost-effective and scalable than in-person methods. This unique approach offers an engaging and direct way to monitor customer behaviours, perceptions and preferences in relation to financial products and services on an ongoing basis, rather than relying on periodic in-person surveys, which are logistically difficult, error prone and prohibitively expensive.

Our approach addresses several challenges associated with in-person/paper-based field data collection and communication.

First, voice-based surveys bring down cost (based on inputs from agencies such as CMF-IFMR, PRASA Anusandhan Sansthan, and AV Communications in India):

<table>
<thead>
<tr>
<th>DATA COLLECTION METHOD COST COMPARISON</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVR</td>
</tr>
<tr>
<td>PHONE</td>
</tr>
<tr>
<td>IN-PERSON</td>
</tr>
</tbody>
</table>

In addition, in-person data collection has limited scalability and frequency due to logistical constraints, whereas IVR can reach hundreds of thousands of recipients in a single day. There is also an inconsistency in delivery of survey content associated with in-person communication, and lack of transparency. With our voice outreach, we can measure that, for example, the average listen rate is 69.0% of the message duration and the average message completion rate is 52.3%.
Next, there are errors and time-lag due to incorrect data entry on paper surveys; IVR enables real-time results that are collected on a software platform. IVR enables rapid A/B testing and content iteration because of its quick response time. IVR also eliminates response bias associated with in-person data collection since the system asks the question in the same way regardless of recipient. Based on our experience, we recommend deploying IVR surveys for shorter-form surveys rather than long surveys. We found that surveys that have fewer than five questions are most effective.

Knowledge Retention Survey

In addition, Awaaz.De measured the impact of the pilot’s edu-tainment content on customers’ understanding of important financial literacy concepts. We compared treatment groups of customers who listened to the entire relevant edu-tainment content versus control groups of customers who did not listen to the same content. To do so, we prompted customers to answer knowledge assessment multiple-choice questions delivered via IVR. Ultimately, the survey findings showed (see, Figure 3) the relevant treatment groups had substantially higher understanding of both a key benefit of digital financial services and a key Saath savings product feature.
Interestingly, beyond data collection, our pilot highlights the value of financial literacy messaging paired with questions. We know that a real barrier to serving last mile communities is awareness and understanding. Since the power of voice is accessible to the un(der)banked, using IVR can address both issues by offering financial education via engaging voice episodes, and data collection in a limited, focused way with frequent short surveys. In this way, not only do consumers receive valuable information and education, but service providers receive valuable data and insights, offering a mutually beneficial and interactive approach for financial inclusion.

In summary, our findings show that institutions focused on inclusive financial services can leverage story-based content delivered via IVR as a cost-effective tool for customer communication. Beyond data collection of customers’ financial behaviours and perceptions, we see IVR’s use cases spanning financial literacy, behaviour change, and lead generation. Most importantly, the accessibility, adaptability, and effectiveness of IVR makes it a worthy supplement to financial services delivery at the last mile.
About Awaaz.De

Awaaz.De develops inclusive technology to improve the lives and livelihoods of under-served communities across the world. With our end-to-end mobile communications platform spanning campaign design, content creation in local languages, IVRS delivery and data analysis, we strive for maximum social impact.

Leading organisations in Agriculture, Finance, Health, and Education trust Awaaz.De’s full-service platform to communicate at the last mile. Since 2012, Awaaz.De has served 240+ partners, delivering 60,00,000+ phone calls to 10,00,000+ beneficiaries across 23 states in India and 12 different countries.

Moreover, a Harvard University research study showed our platform gives a 10x social impact ROI and achieves a 75% cost savings for data collection compared to in-person surveys.

Awaaz.De is headquartered in Ahmedabad, with business operations in Mumbai.