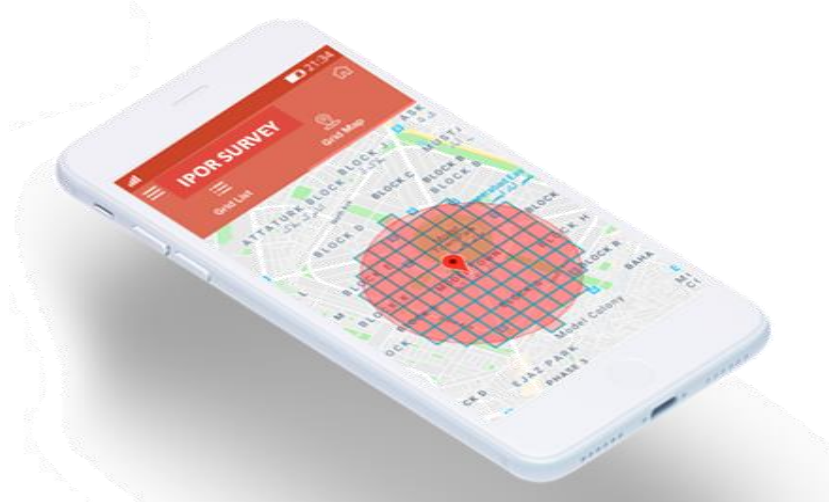


### A technological Revolution in Data collection:

IPOR believes in innovation and perfection. Quality in data collection is our prime focus. In last eight years IPOR constantly tried to take measure to collect accurate data and adopt advance technology for data collection and monitoring. IPOR has introduced a ground breaking data collection technology first time in Pakistan. This advance form of CAPI is a great way to overcome the limitation of paper based and traditional data collection method. This app allow to pre-lock the sampled locations, record audio of the interview and create GPS location/heat maps. It also hold the capability to provide real time data management and analysis.



The choice to acquire and use a new innovation is because of the limitation of using orthodox data collection method.

In Pakistan paper based data collection is widely used but it has few limitations like;

- There is a chance that field team may work outside of the sample PSU
- Missing Response in the questionnaire is the biggest challenge
- In data entry typo error, Illogical response, missing data etc.
- Sometime courier issues make it difficult to receive field work on time.

Because of the above mentioned limitations now many organization has started working on CAPI (Computer Assisted Personal Interviews). Followings are the benefits of using CAPI for data collection.

- ✓ Faster turnaround time
- ✓ Improved data accuracy & integrity
- ✓ Easy amendments in android App
- ✓ Automatic time, date & location mapping (GPS coordinates)
- ✓ Instant access to summary statistics

Though CAPI has improved the quality of data collection and make data collection more accurate, transparent & efficient but traditional CAPI method also has some limitations like:

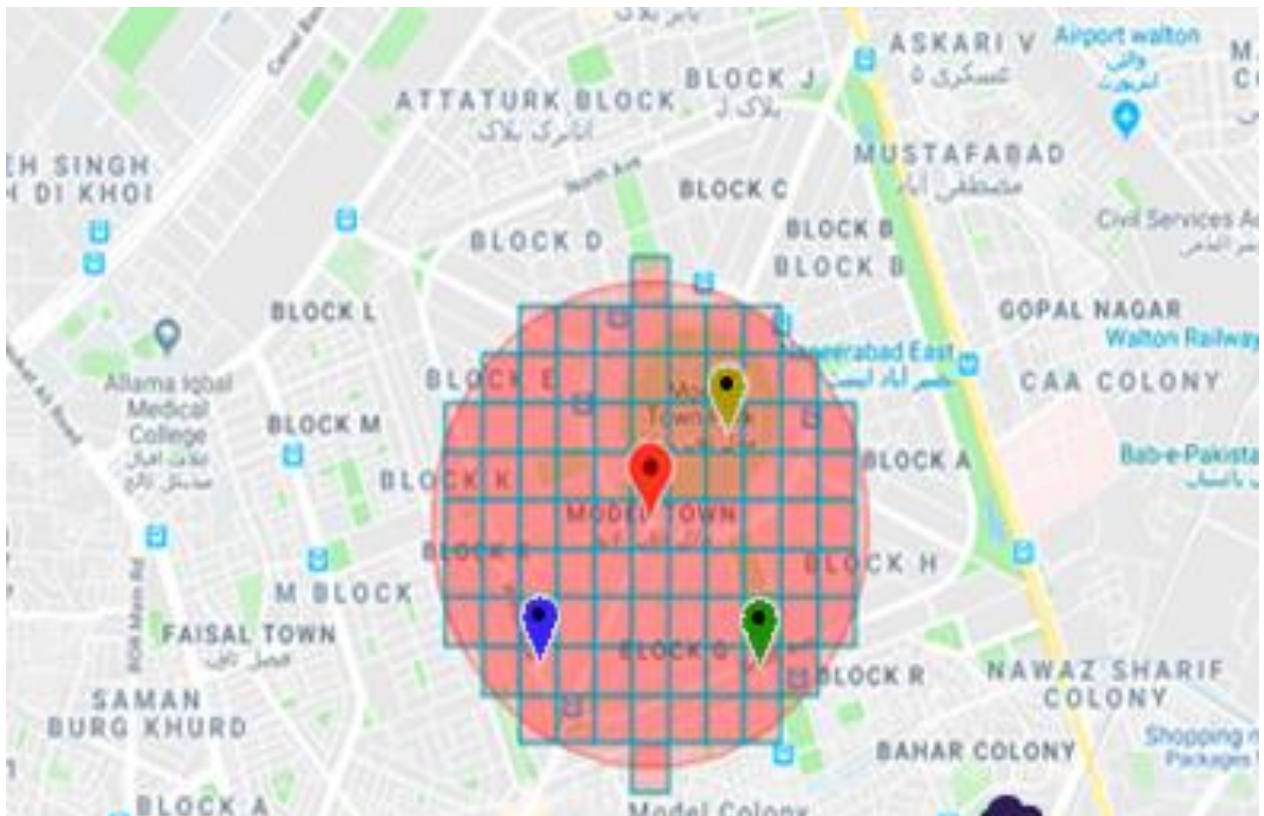
- No concept of pre locking of the sample location
- Heat maps are the only way to check the accuracy of the selected sample

- Traditional CAPI not supported to record the audio of interview
- In traditional CAPI method no provision of using multiple languages
- Traditional CAPI allow very limited control on responses.

### Recent Development

IPOR in consultation with an IT firm ensures most accurate data collection methods by using latest Android application. Below is the brief introduction of this advance data collection method:

This is the advance form of the CAPI to collect reliable data from the field. It combines recent advances in smart phone application and google maps to collection high quality data. How our method is different from traditional CAPI:



### Pre-lock the sample locations:

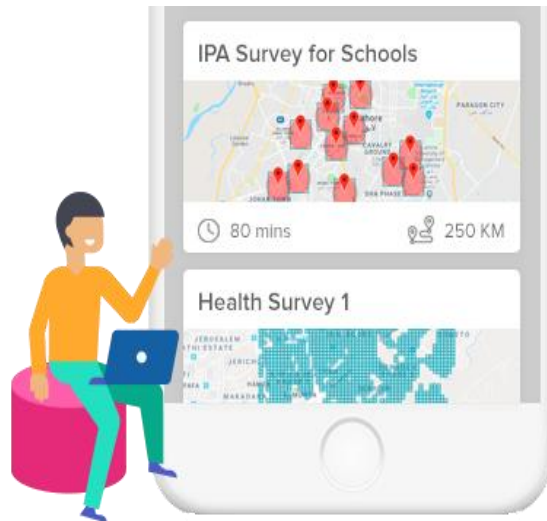
In this method we can Pre-lock the sampled locations to bound enumerator to work within the radius of that location. Application will only work if the enumerator is in the pre-locked locations. If enumerator outside the box application will not work.

### Identification of survey targets:

With the help the satellite imagery (Google Map) you can identify the survey targets. With the help google map we can easily identify the houses & buildings etc.

### Heat Map:

Application will automatically generated heat map of data collection. This will help you to assure the accuracy of sampled location and randomly selection of household.



### Voice Capture:

You can easily record every interviews & later you can play back these responses and can rate interview. Data manager has right to accept or reject the interview after listing audio file.



### Multiple Language Support:

In this application you can upload questionnaire in multiple languages for example Urdu & English.

### Easy amendments in application:

You can easily make amendments in application during the field work. Enumerators can easily update their application within few minutes by refreshing application.

### Real time Management and monitoring of survey:

With the help of satellite imagery to accurately identify survey targets, tracks & monitors enumerators in real time using smart phone application. We can also rate the survey quality by back checks, Enumerator progress chart, spatial analysis etc.

