Globant helps a leading market research company improve Consumer Price Index collection.
The client is a leader in global market research and business analysis with a presence in over 80 countries. As part of one of the world’s largest insight, information and consultancy groups, the brand has more conversations with the world’s consumers than any competitor, maintaining data on individual human behavior and attitudes across cultural, economic and political regions.
The Consumer Price Index (CPI) is the official measure of inflation of consumer prices compiled by a country. The CPI, calculated as a percentage, is the average price increase for a basket of 700 goods and services.

This client provides inflation data to each country’s statistics office. During the first week of each month, price collectors record roughly 120,000 prices for more than 500 goods and services. Price collectors contracted by the client visit a variety of shops in about 150 locations throughout the country to get data for the country’s statistics office. Price collectors visit most local shops. Some collections are done by telephone. The same shops are queried each month for prices of the same products, so that over time the results are comparable.

There is also staff to collect prices of some 70,000 items sold online, by email and telephone. Prices for admissions to sports events, utilities, magazines, newspapers, rail fares, etc. About 80,000 prices for 190 items are obtained from suppliers for use in the CPI and some other computations. Central staff verifies the data. All data, whether collected via mobile devices or from suppliers, goes into databases for validation. The results are provided to each country’s statistics office for calculation of rates of inflation.

Advances in technology since this contract was awarded to the client in 1994 replaced the manual compilations of a vendor previously responsible for collecting inflation data.
In 2013, the client tasked Globant with the development of a fully automated CPI data collection solution to replace an existing application that collected some of the CPI data. The requirement was to improve the entire process and move it to mobile applications that collect data and connect it to office infrastructure. The mobile application had to work offline and on the phone, and application updates had to be made online so all the collectors could get new releases without interruption of their work. Additionally, the information collected needed to be uploaded and synced to the master databases.
The Solution

Working closely with the client's team, Globant developed a mobile application that automated the entire collection process and made it more efficient, precise and transparent.

The solution focussed on 3 main areas:

1. The mobile application: **CPI Collection Program App** - Collectors use this app to collect data in the field. It is a native Android application that runs in kiosk mode. The application supports two roles: collector and supervisor.

2. The **Server infrastructure**. Globant designed and implemented a REST (Representational State Transfer) interface, including security protocols. The interface, is synchronized with the master database. Globant didn't build the master database but added the interface that supports data synchronization.

3. The **Back Office** - Globant implemented a Web application that makes the REST interface accessible to administrators who control and analyze information.

The CPI Collection Programme App has features that include: notification of collected items (tick) to avoid duplicates, back-check so collectors can plan the collection route, tools for conversion (multipack conversion, VAT, unit conversion), price history for categorization, on-site report generation, suggested items and maps.
Applying agile methodology to the project, Globant provided a user-friendly, quality product, exceeding the client’s expectations of cost, time and quality. The pilot program was launched and finished in September to be deployed in November.