BFA

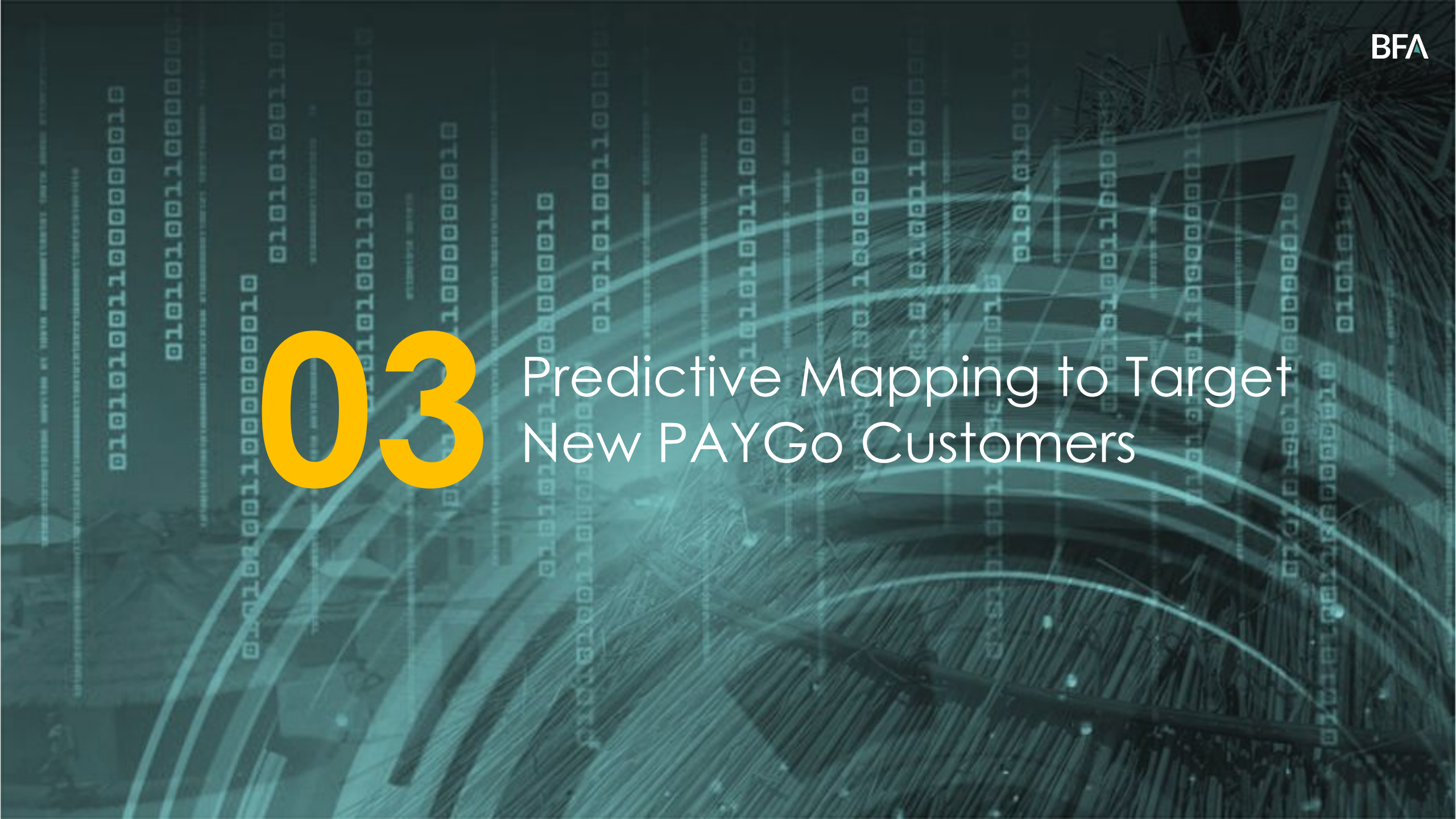
INNOVATION IN FINANCE, DATA AND TECHNOLOGY.
FOR A MORE SUSTAINABLE AND EQUITABLE WORLD.

BFA's PAYGo NEXT Innovation Gallery | GOGLA AGM

BFA

Amsterdam | 18TH June 2019

www.bfaglobal.com | @bfaglobal


BFA
03
Predictive Mapping to Target
New PAYGo Customers

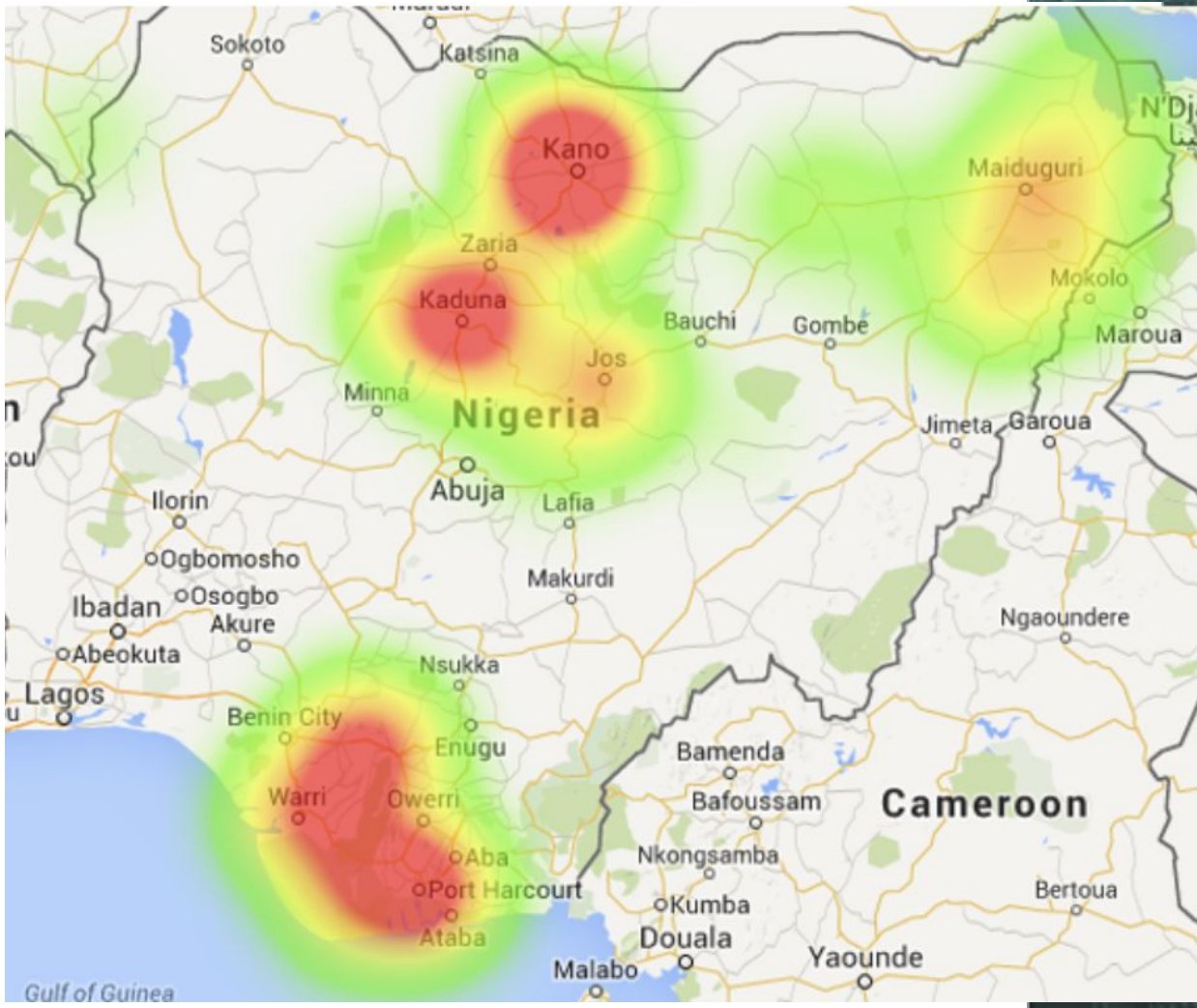
PAYGo Lead Finder - Use Cases

- Where should I focus sales and service operations once I've selected a new country?
- Within those areas, where should I limit my operations based on where people have cellular coverage, access to pay points, etc.?
- And then over the course of the year, where should I focus my sales and then collections efforts?

PAYGo Lead Finder - Intro

Geospatially visualized sales prediction tool

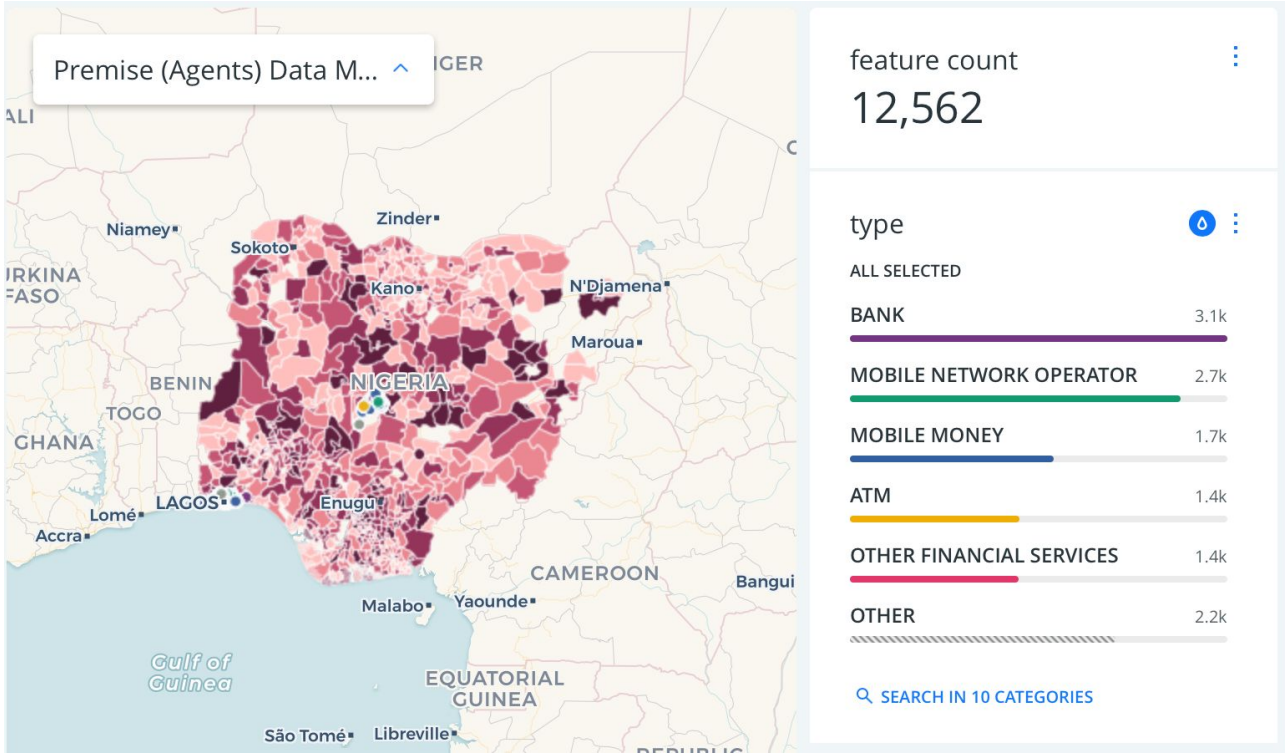
- Geospatially visualized sales prediction tool to assist in evaluating deployment opportunities
- High resolution geospatial data sets are layered on top of each other to enable deep insight generation
- Machine learning algorithms can infer where physical structures exist in a country, and in turn, things like population density or market opportunity heat maps



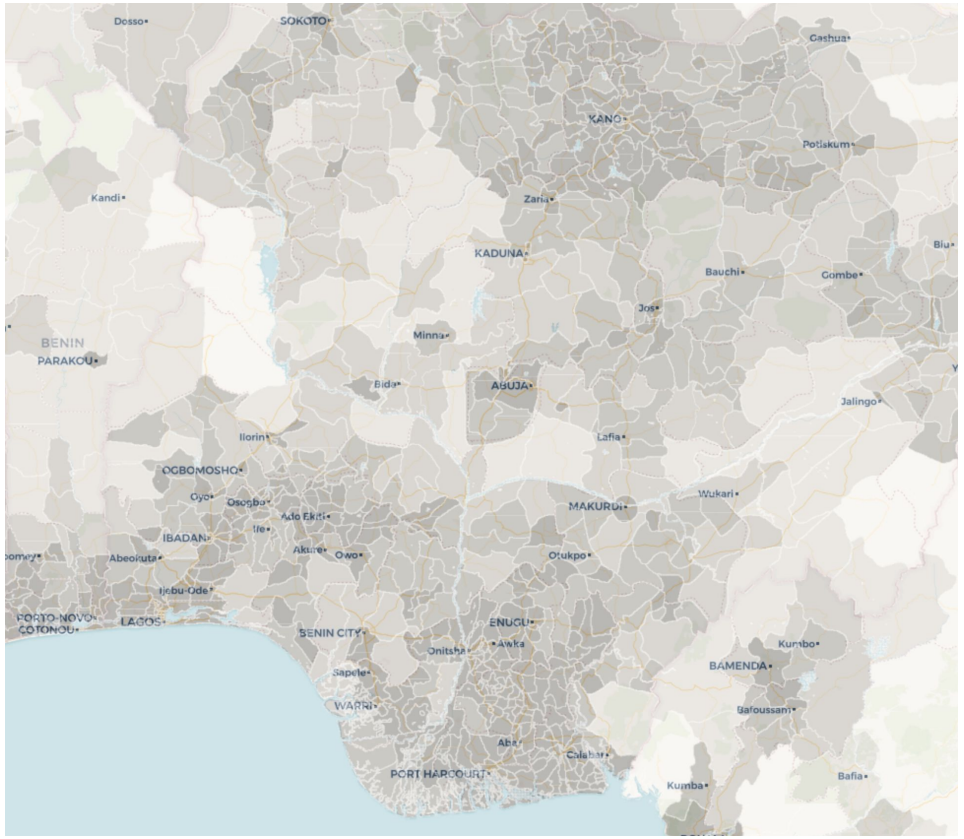
Nigeria Data Stack

https://datastack.global/

Data Layer Examples

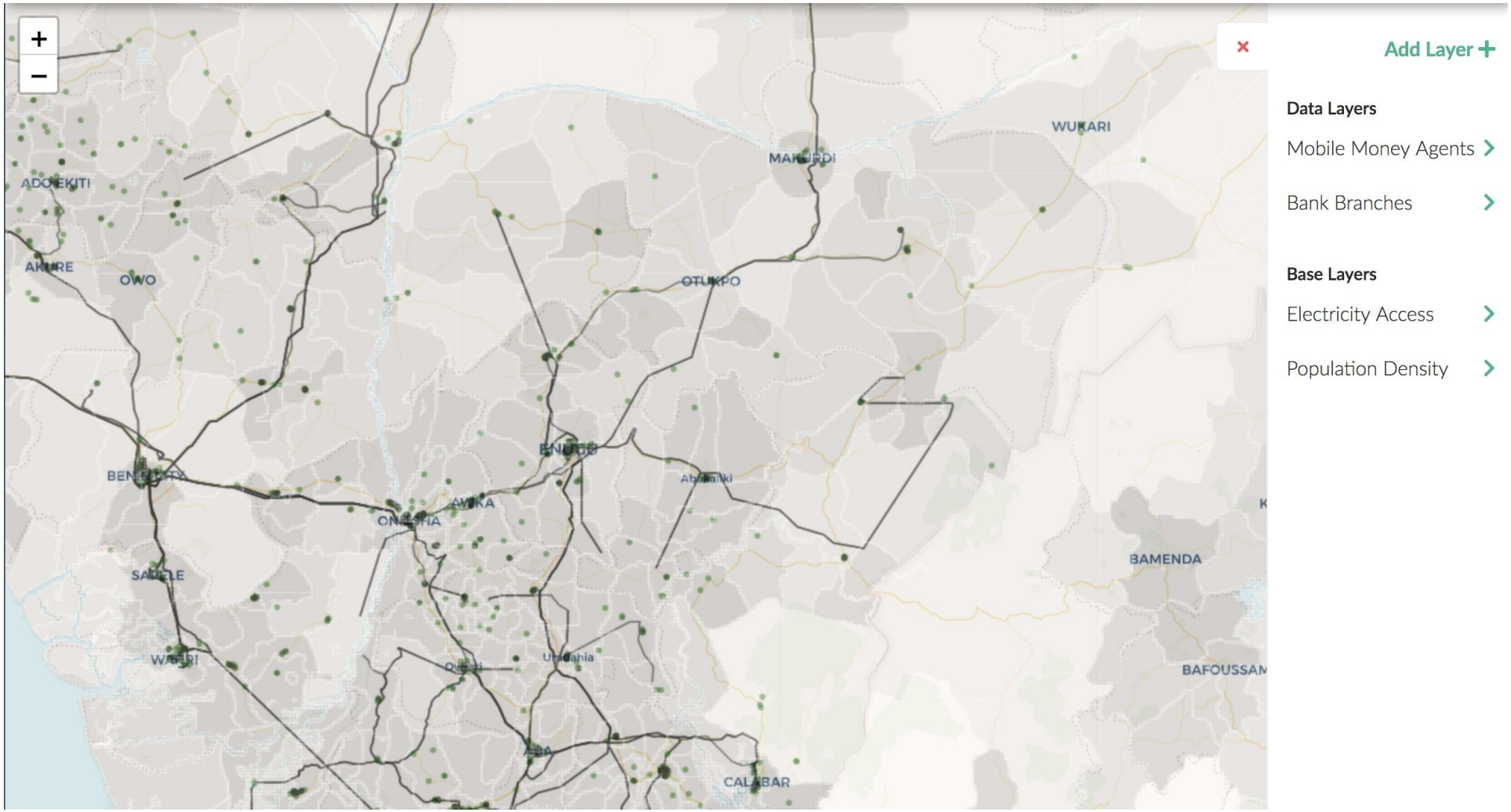


Bank branch & mobile money agent location density



Population density

Use Case: Where should I sell (and limit sales)?



The next iteration of PAYGo Lead Finder

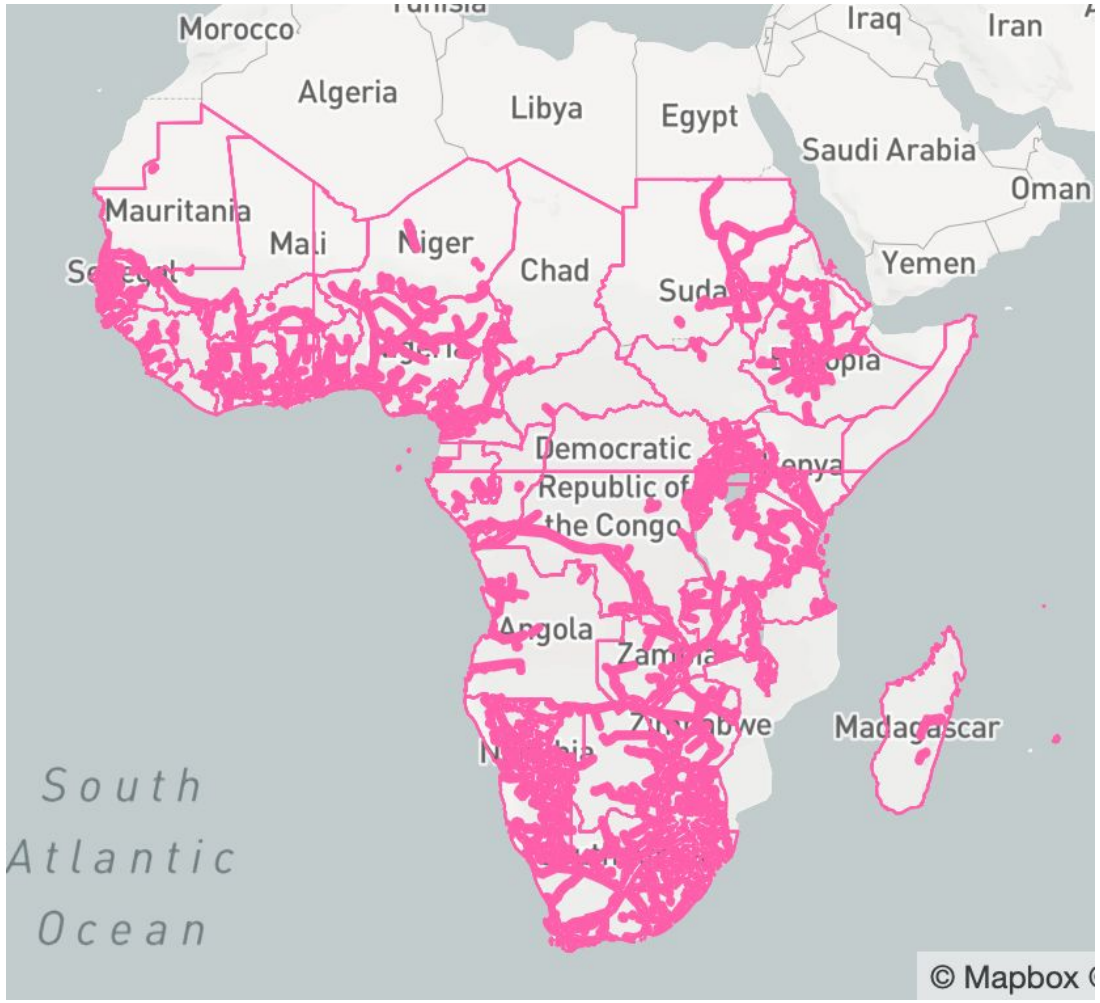
Viability

- **Data**: Access to high-quality satellite imagery and geo-tagged data is key
- **Desirability**: Improving the model over time using data collected from sales & visits could help optimize customer service
- **Opportunities**: BFA working on a Supply Side Data Stack initiative with private-sector-facing interfaces that include this type of data and analysis
- **Roadmap**: Have easy access to some data for some countries. Would ideally like to incorporate cellular coverage,

Looking Ahead

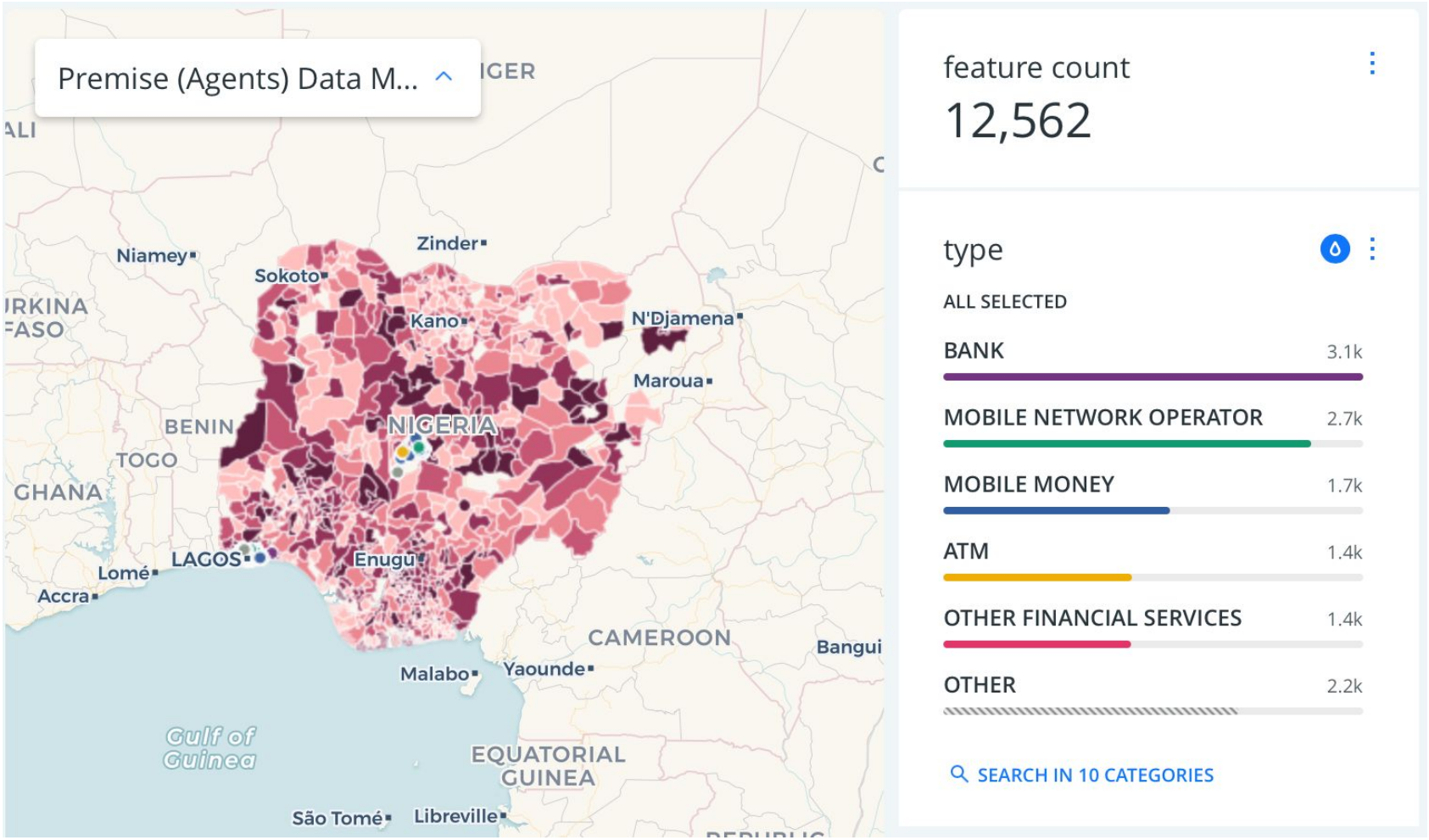
- **New Datasets**: Cellular connectivity, other predictive grid modeling (i.e. from Facebook), precipitation and other weather data, etc.
- **Expand Use Cases in Energy**: Explore incorporation of time-series options to inform how to modify operations throughout the year based on anticipated droughts, harvests, etc.
- **Other Sectors**: Explore applications to other last-mile utility models beyond PAYGo solar home systems, including mini-grids, grid utilities, decentralized water

Distance from Grid

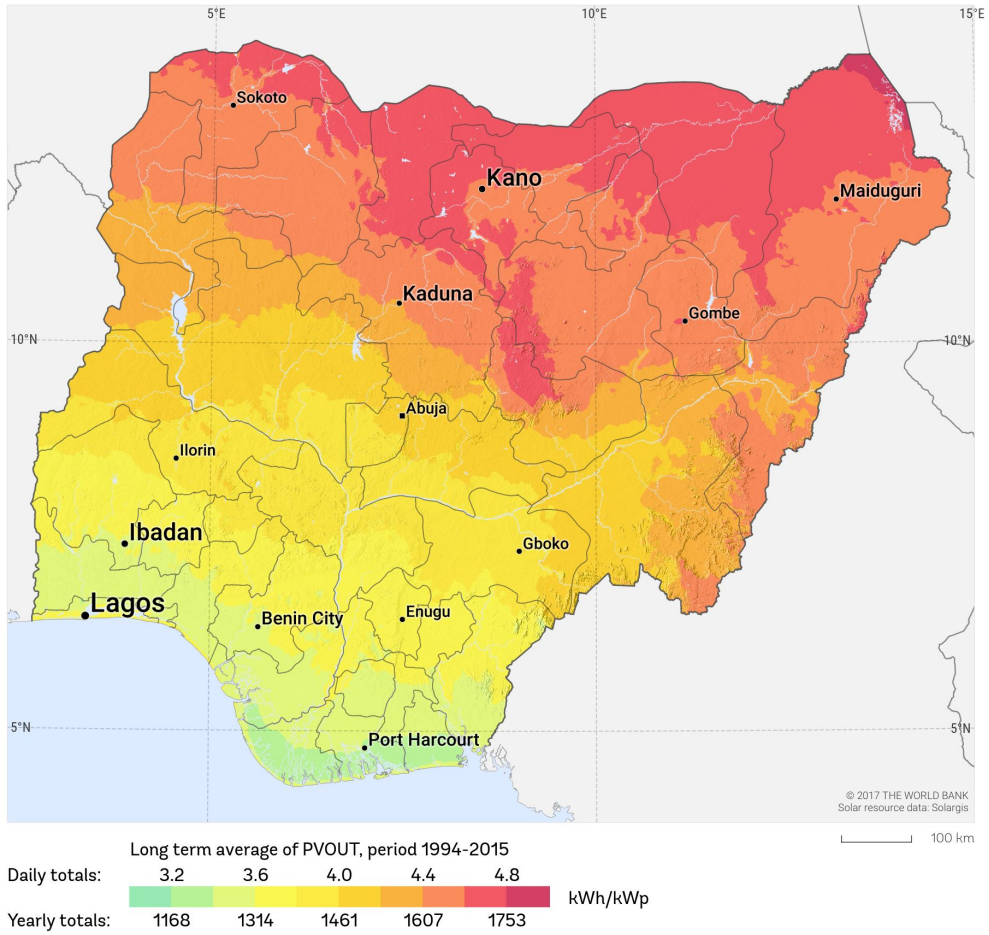


A GeoJSON with areas in Sub Saharan Africa that are at least 5km, 15km, or 30km from the grid. Original grid data was pulled from OSM on October 6 and complemented with data from the African Development Bank. More here.

Mobile Money Agent Density



Solar Generation Power



The maps and data for Nigeria have been released in parallel with Global Solar Atlas, which is published by the World Bank Group, funded by ESMAP, and prepared by Solargis. More here.

EFInA 2017

The EFInA Access to Financial Services in Nigeria survey is nationwide and covers over 20,000 consumers. The survey is conducted every two years and aims to:

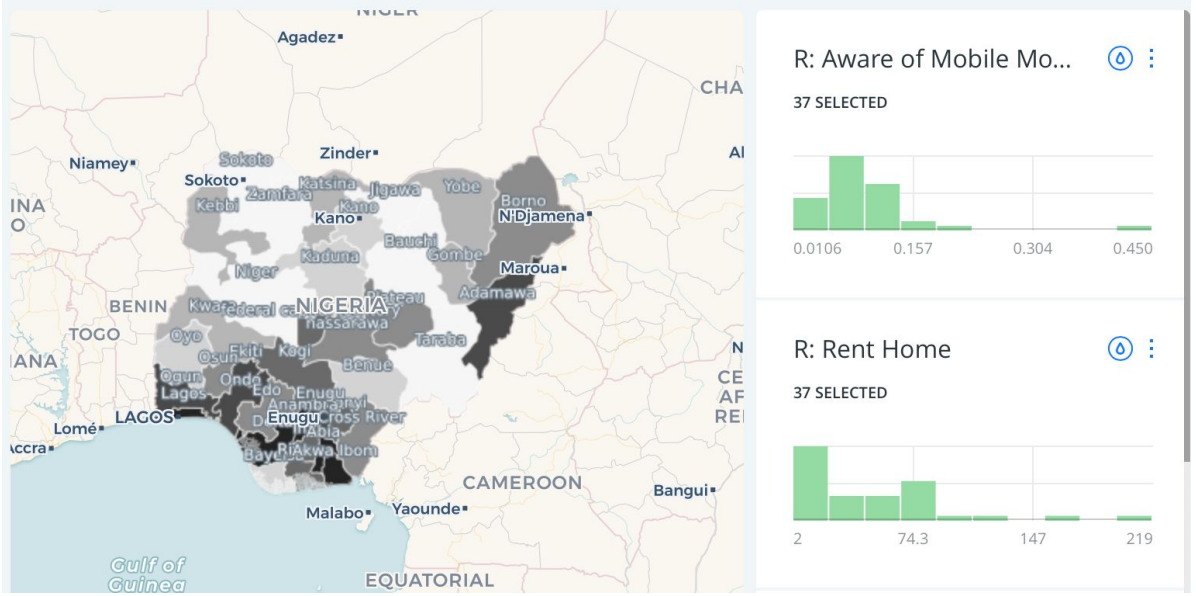
- Establish credible benchmarks and indicators of financial penetration in Nigeria.

- Document usage of financial products across both formal and informal sectors from an urban and rural perspective.

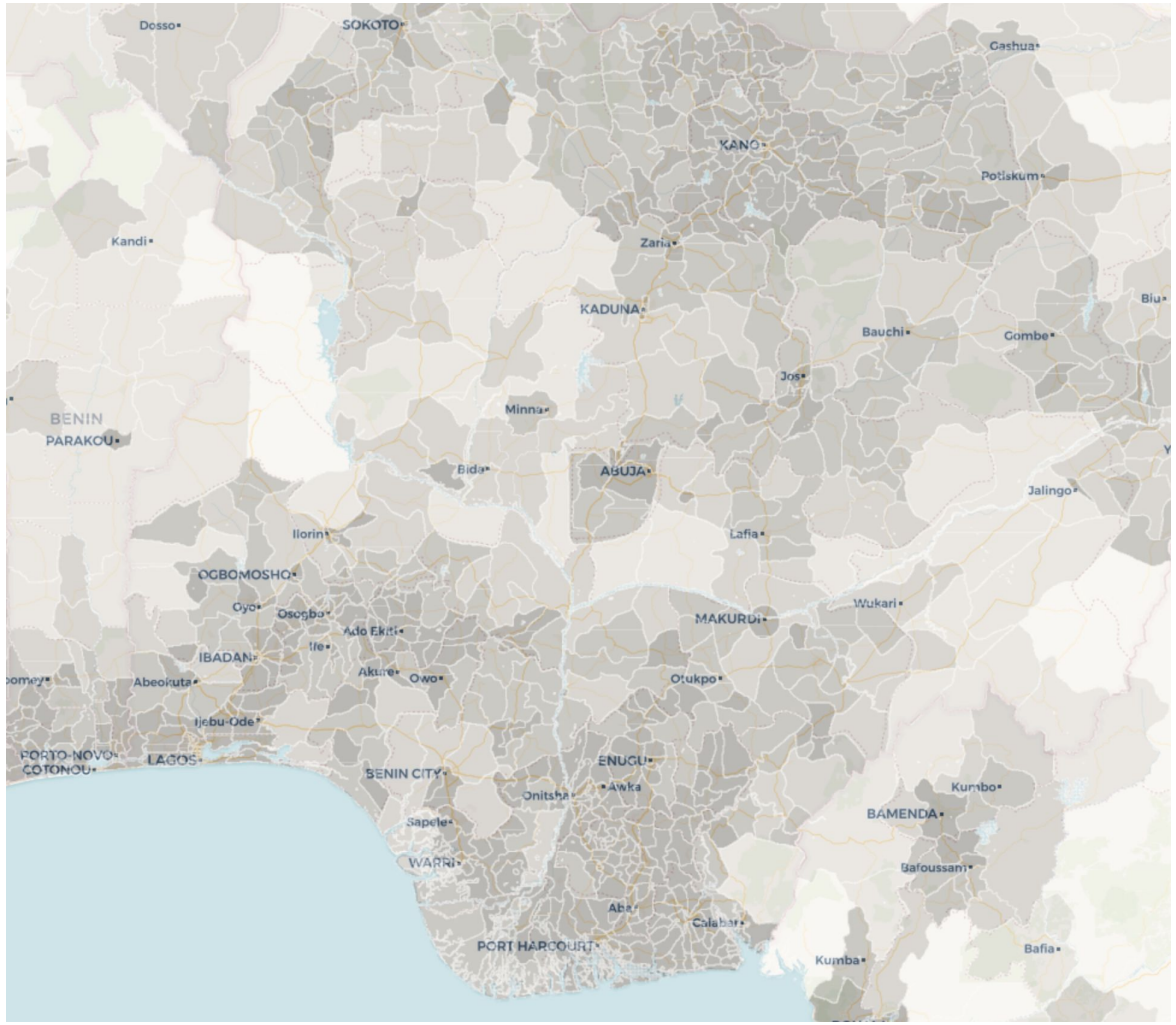
- Provide insights into regulatory and market obstacles to growth and innovation in the financial sector.

- Identify the financial needs of the adult population and thereby give service providers the opportunity to develop innovative products to serve them.

- Provide credible data that highlight opportunities for policy reform and support evidence based financial inclusion policies.



CIESEN Population Data



The Gridded Population of the World (GPW) collection, now in its fourth version (GPWv4), models the distribution of human population (counts and densities) on a continuous global raster surface.

State-of-the-art computer visioning techniques developed by Facebook identified buildings from high-resolution commercial satellite images—the same type of imagery made available via publicly accessible mapping services. CIESIN then combined this information with census data to generate population estimates and worked with Facebook to validate the results.

See more information here and here.

Thank **you!**

www.bfaglobal.com
info@bfaglobal.com
@bfaglobal