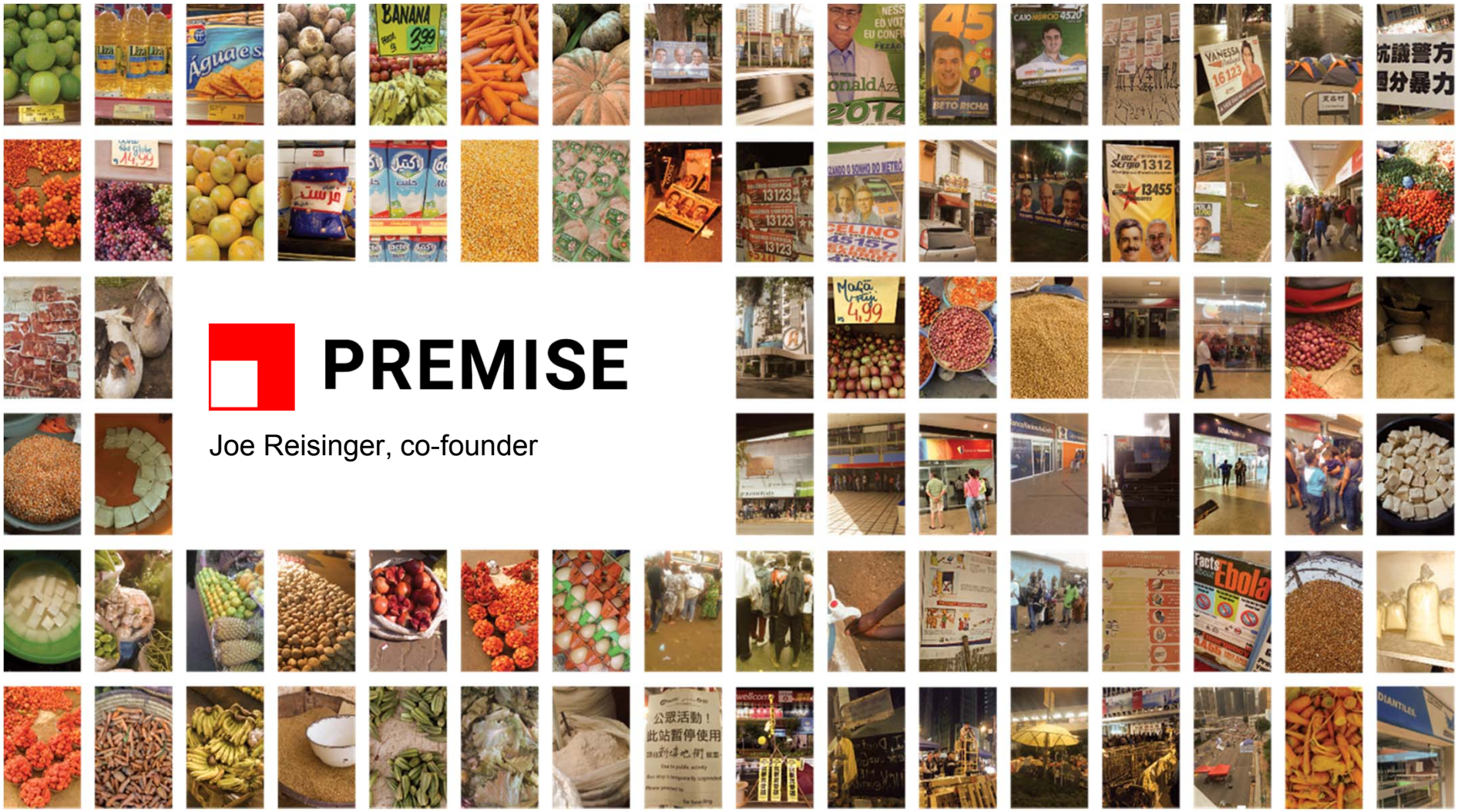
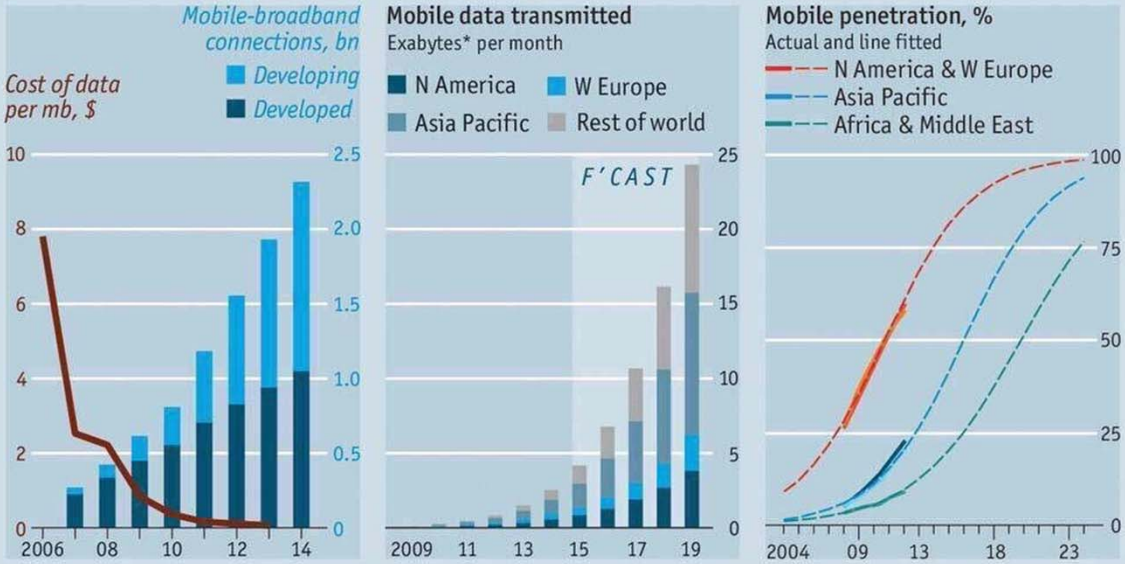



# PREMISE

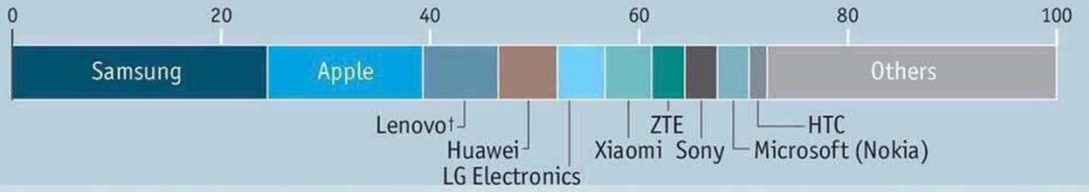
Joe Reisinger, co-founder

## Transformation in action

2



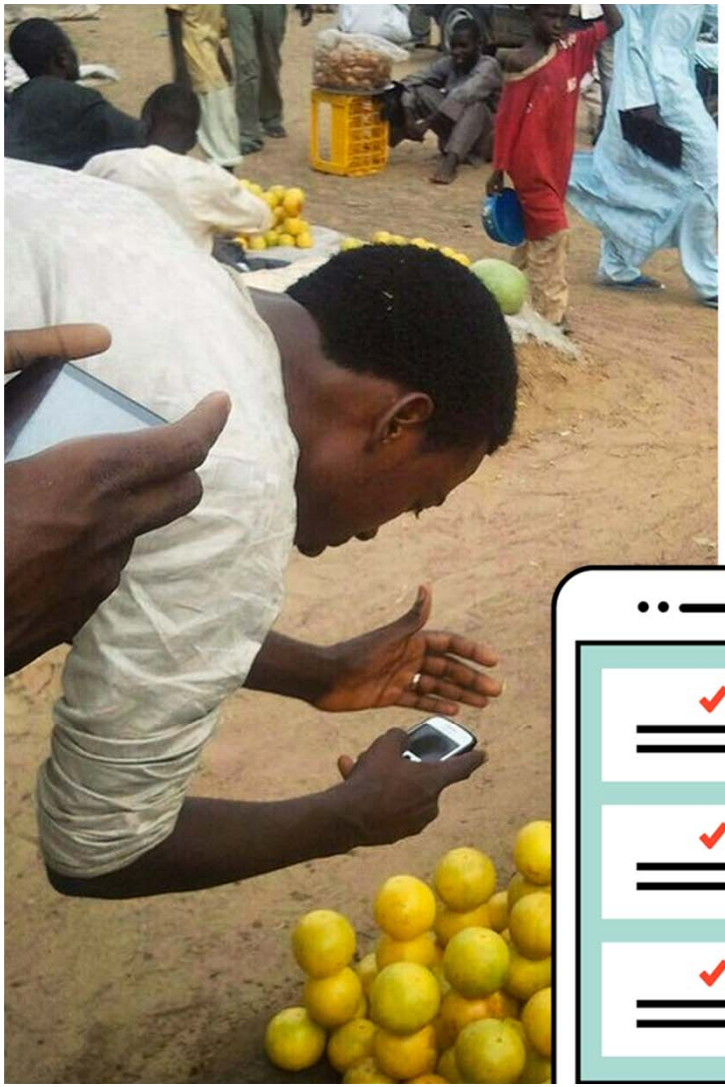

**Smartphone shipments by manufacturer**, 2014, %




Sources: Asymco; Boston Consulting Group; Cisco; IDC; ITU

*1 exabyte=$10^{18}$ bytes †Including Motorola

Economist.com



How Premise Works

# The Premise Network

Premise connects **20,000 data contributors** in **20+ countries** engaged in verifiable real-world measurement tasks, earning micropayments in local currency.

How Premise Works

# What Premise Measures

Instrumenting the physical world to understand evolving economic and human development trends

### ECONOMETRICS

Inflation
Market trends
Sub-national price trends

### RESOURCE SECURITY

Food
Energy
Water

### INFRASTRUCTURE

Transportation
Electrification
Financial access

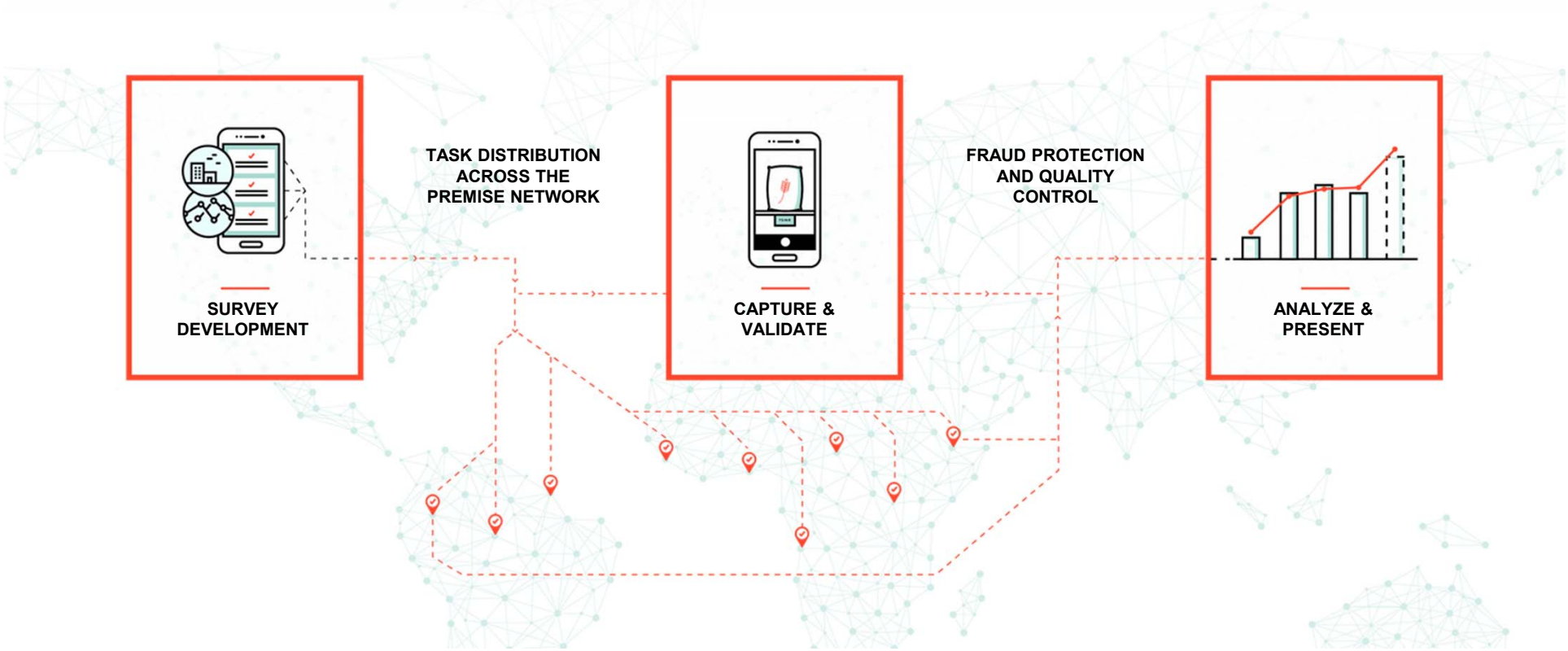
### PUBLIC POLICY

Public health
Tax implementations
Gender-based violence

How Premise Works

# The Premise Platform

An elastic real-world knowledge collection engine



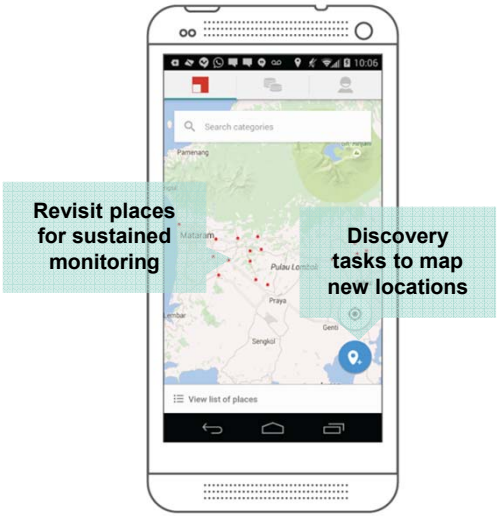
How Premise Works

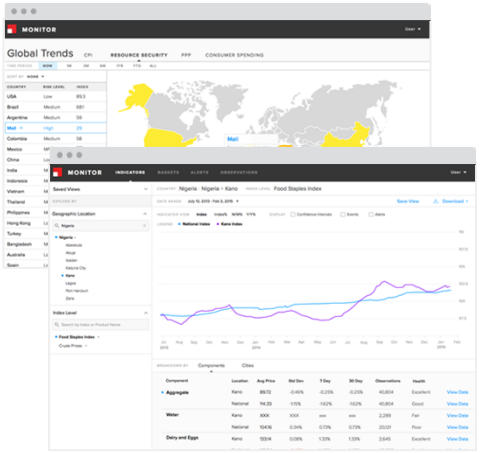
# Micro Identification → Meso and Macro Insight

The platform scales by deploying **two** modes of surveys -- discovery and revisits -- across a programmable geo-spatial **sampling frame** that identifies & aggregates micro phenomena leading to meso and macro insights

**GLOBAL TO SUB-CITY SAMPLING FRAMES** → **SURVEY TYPES: DISCOVERY + REVISITS** → **REPRESENTATIVE SAMPLING STATISTICS**

20+ countries, 100+ Cities



## Select Customers

WORLD BANK GROUP

FAO

WFP

BILL & MELINDA GATES foundation

Standard Chartered

## Independent Director

**Larry Summers**
President Emeritus & Charles W. Eliot University Professor of Harvard University

## Advisory Board

**Raj Shah**
Former Head, USAID

**Alan Krueger**
Professor, Princeton University

**Hal Varian**
Chief Economist, Google

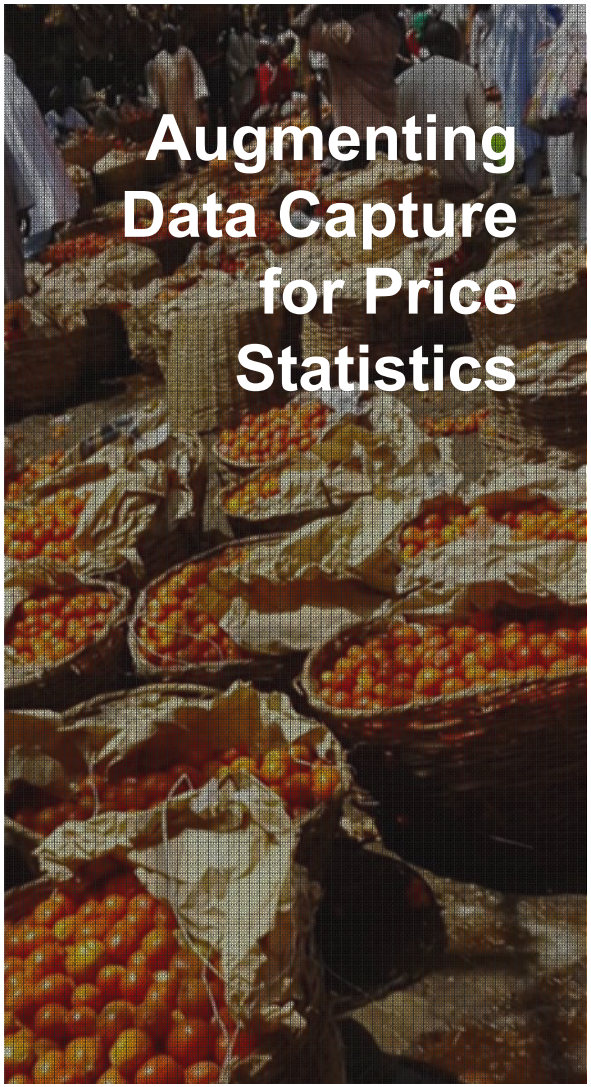
## Investors

Valor Equity Partners

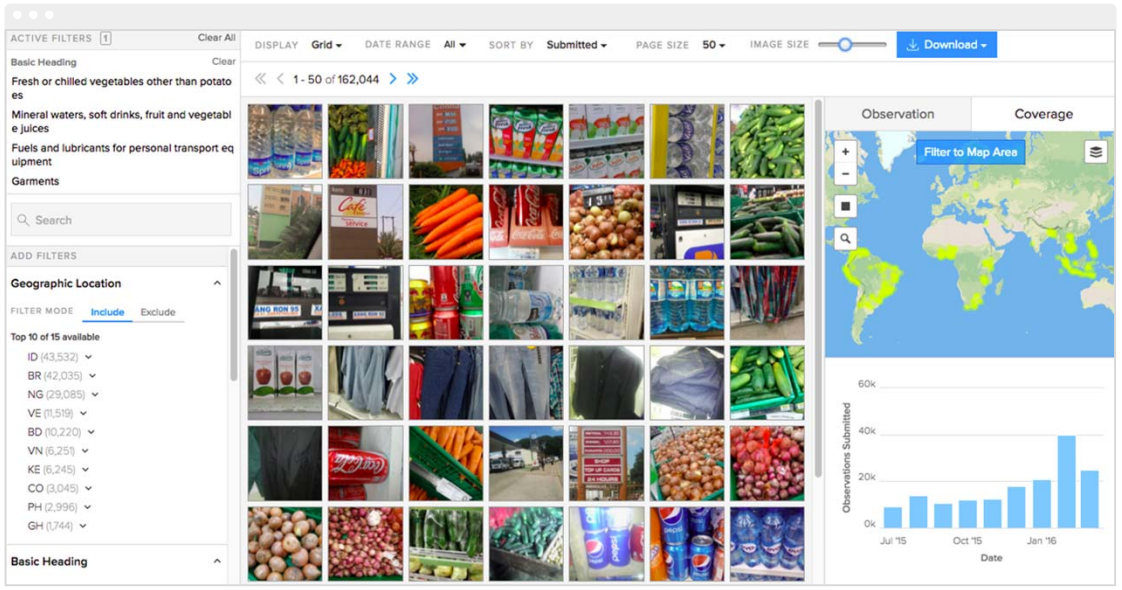
Social + Capital

Google Ventures

Andreessen Horowitz



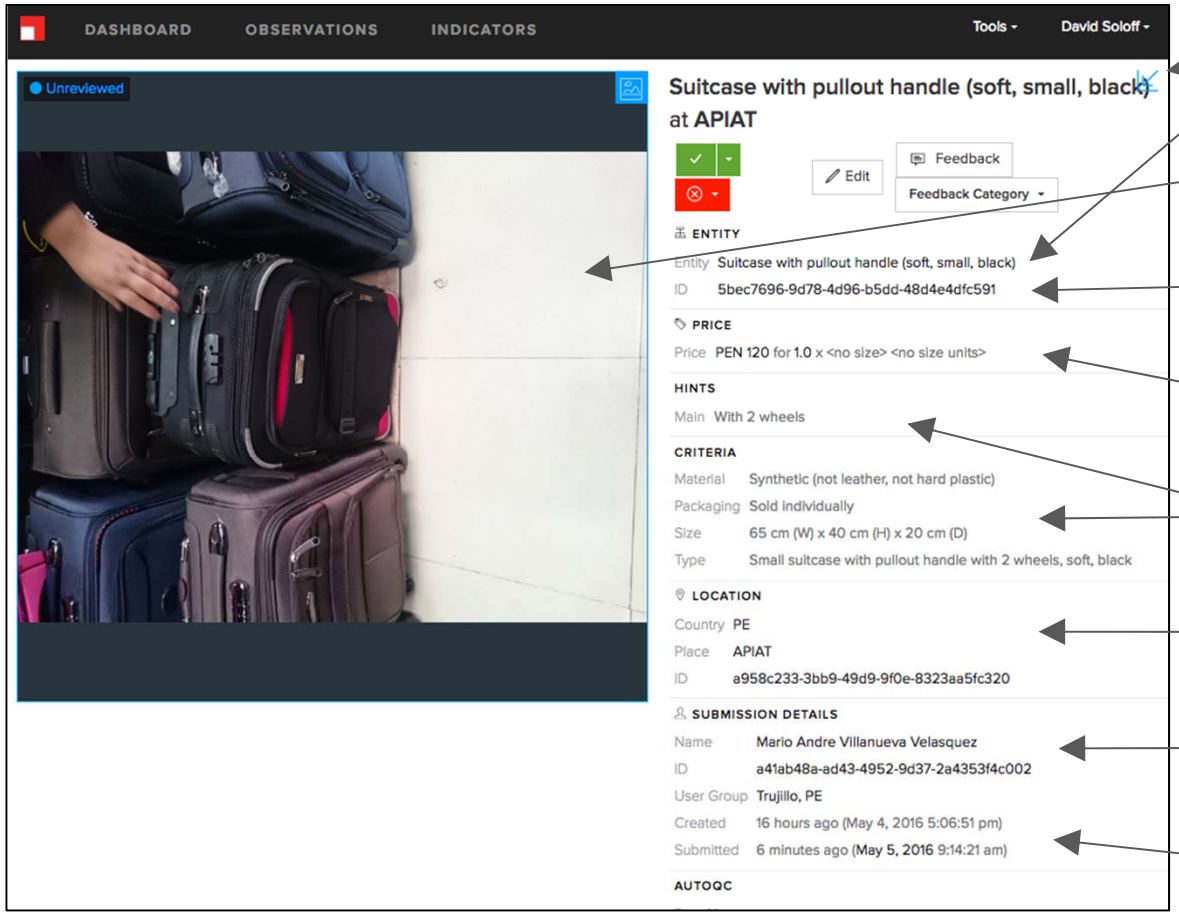

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP




*Price data as depicted in Premise's dashboard customized for The World Bank.*

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

# Rich Attributes: quality, location, frequency




TOP-LEVEL ITEM DEFINITION

VISUAL PROOF

UNIQUE EVENT IDENTIFIER

PRICE (QUANTITY; SIZE)

DETAILED ITEM CHARACTERISTICS

LOCATION (COUNTRY, VENUE, GPS)

CONTRIBUTOR ID (NAME, ID, CITY)

SUBMISSION TIMESTAMP

THE WORLD BANK
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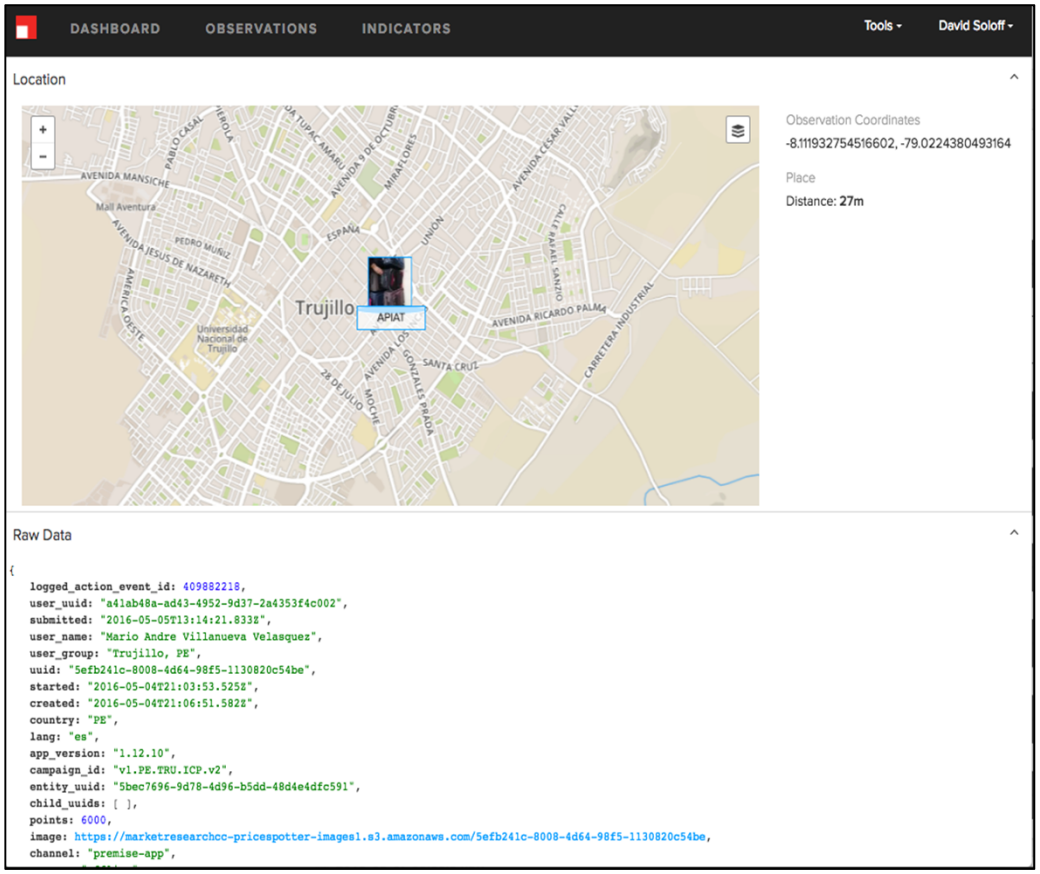
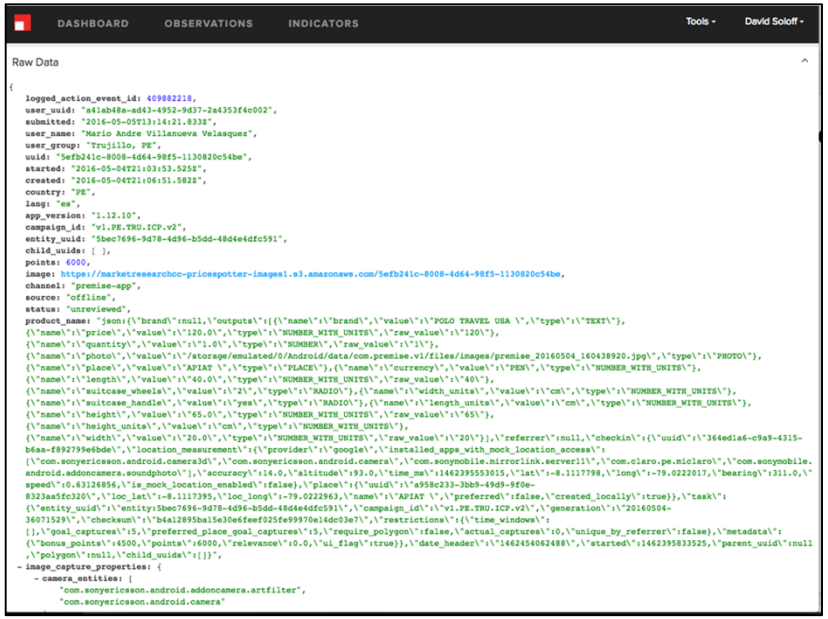
# Rich venue coordinate and attribute data



THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

# Survey coverage

| Entities | ICP Entity |
|---|---|
| Electricity | 110451101 |
| Utility Gas Supply | 110452103 |
| Water Supply With Sewage | 110441102 |
| Water Supply Without Sewage | 110441101 |
| Meal at a Sit Down Restaurant | |
| Meal at a casual dining Restaurant | |
| Meal at a Fast Food Restauarant | |
| Consultation: general medical practitioner/primary care physician | 110621101 |
| Consultation: eye specialist (ophthalmologist) | 110621102 |
| Consultation: urologist | 110621103 |
| Consultation: gynecologist | 110621104 |
| Consultation: pediatrician | 110621105 |
| Dentist: extraction of a tooth, for adult | 110622101 |
| Dentist: filling of molar tooth | 110622102 |
| Blood test: complete blood count (hemogram) | 110623101 |
| Urine test | 110623102 |
| Mammogram | 110623103 |
| Thorax X-ray photograph, for adult | 110623105 |
| Men's coat, WKB-M | 110312131 |
| Men's suit, wool, WKB-M | 110312101a |
| Men's trousers, cotton/polyester, WKB-L | 110312104 |
| Men's blue jeans, WKB-L | 110312107 |
| Men's shirt, WKB-M | 110312103 |
| Men's pullover (sweater), wool/polyester, WKB-M | 110312108 |
| Men's T-shirt, WKB-L | 110312106 |
| Men's boxer briefs, WKB-L | 110312132 |
| Men's ankle socks, WKB-L | 110312105a |
| Women's blazer, cotton, WKB-M | 110312133 |

**NIGERIA** PHASE 1

420

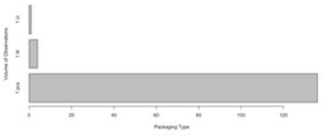
## 1105311 - Refrigerator-freezer, low, 165-190 Liters

OBSERVATION COUNT
143

NUMBER OF CITIES
6

AS OF
July 24, 2015

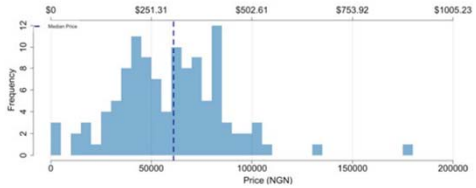
PACKAGING DISTRIBUTION



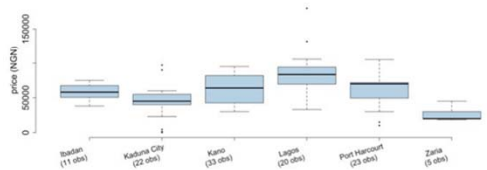
REPRESENTATIVE IMAGES

**MOST PREVALENT UNIT SIZE : 1 PCS**

OVERALL PRICE DISTRIBUTION

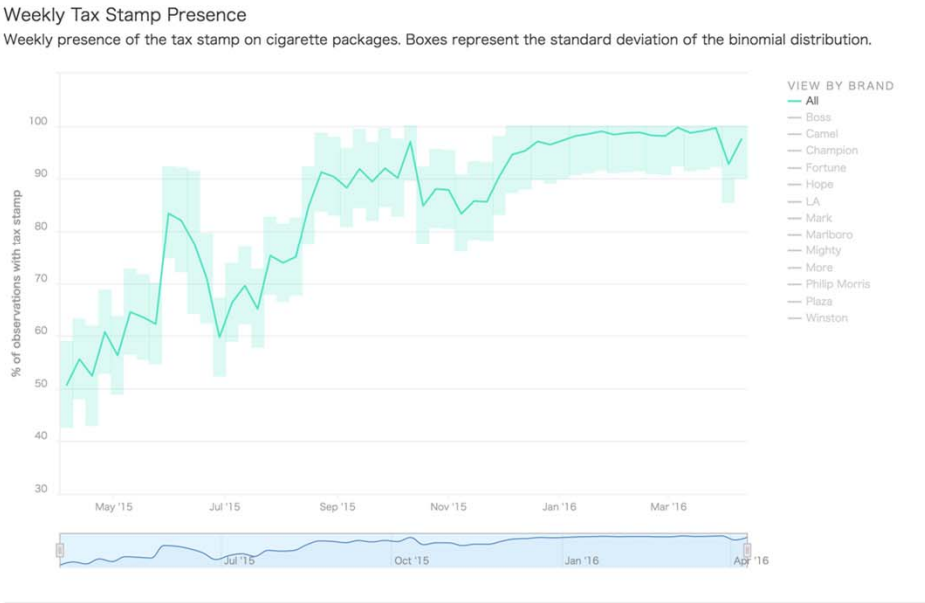


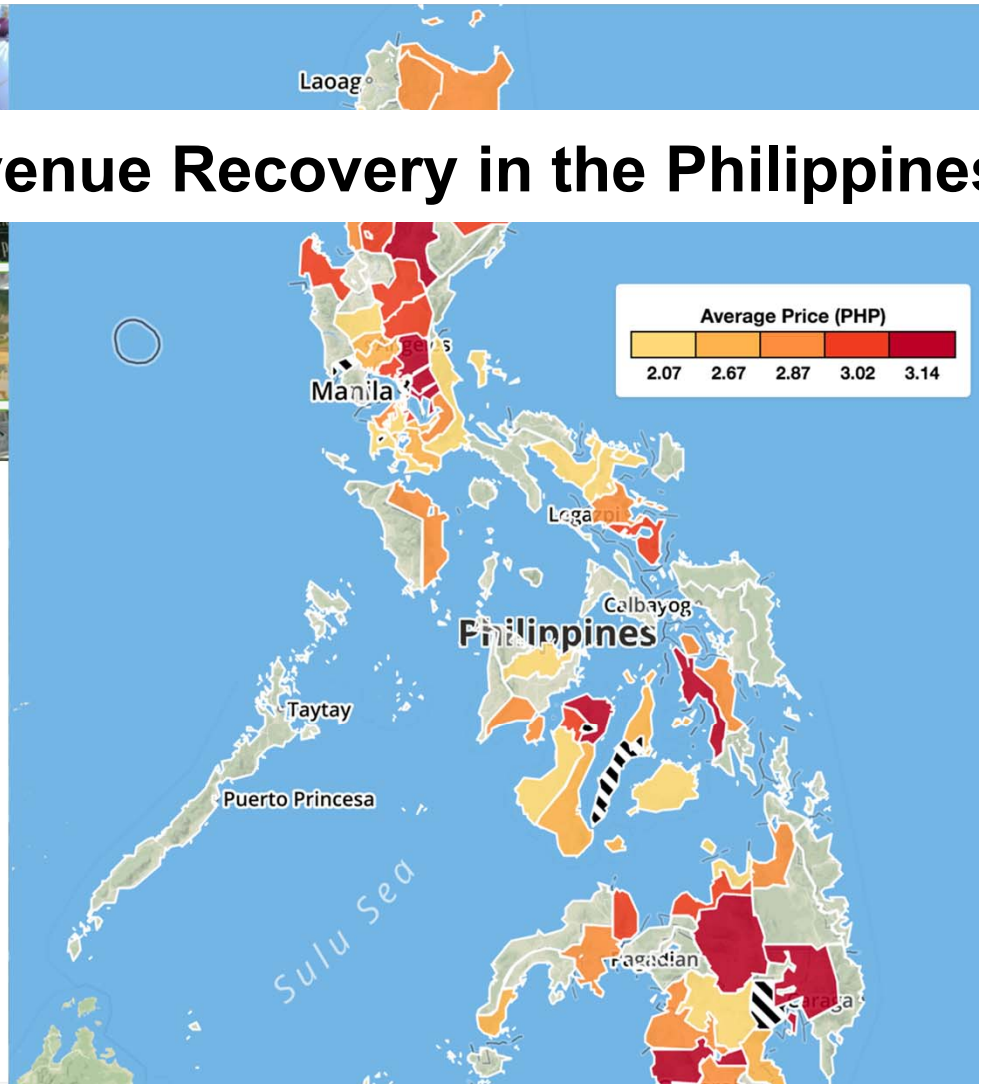

PRICE DISTRIBUTION BY CITY




| | ALL | LAGOS | KADUNA CITY | ZARIA | IBADAN | KANO | PORT HARCOURT | SOKOTO |
|---|---|---|---|---|---|---|---|---|
| # OF OBS | 136 | 20 | 24 | 5 | 11 | 47 | 29 | NA |
| 25TH (NGN) | 44375 | 72750 | 40000 | 20000 | 50500 | 42500 | 50000 | NA |
| MEAN (NGN) | 61912 | 82118 | 44731 | 26700 | 58182 | 65968 | 63110 | NA |
| MEDIAN (NGN) | 63000 | 83500 | 45000 | 20000 | 58000 | 64000 | 70000 | NA |
| MODE (NGN) | 45000 | 33000 | 45000 | 20000 | 70000 | 64000 | 70000 | NA |
| 75 (NGN) | 79625 | 93300 | 55000 | 30000 | 67500 | 83000 | 72000 | NA |
| STD/MEAN | 0.43 | 0.43 | 0.51 | 0.42 | 0.2 | 0.34 | 0.35 | NA |

# Revenue Recovery in the Philippines

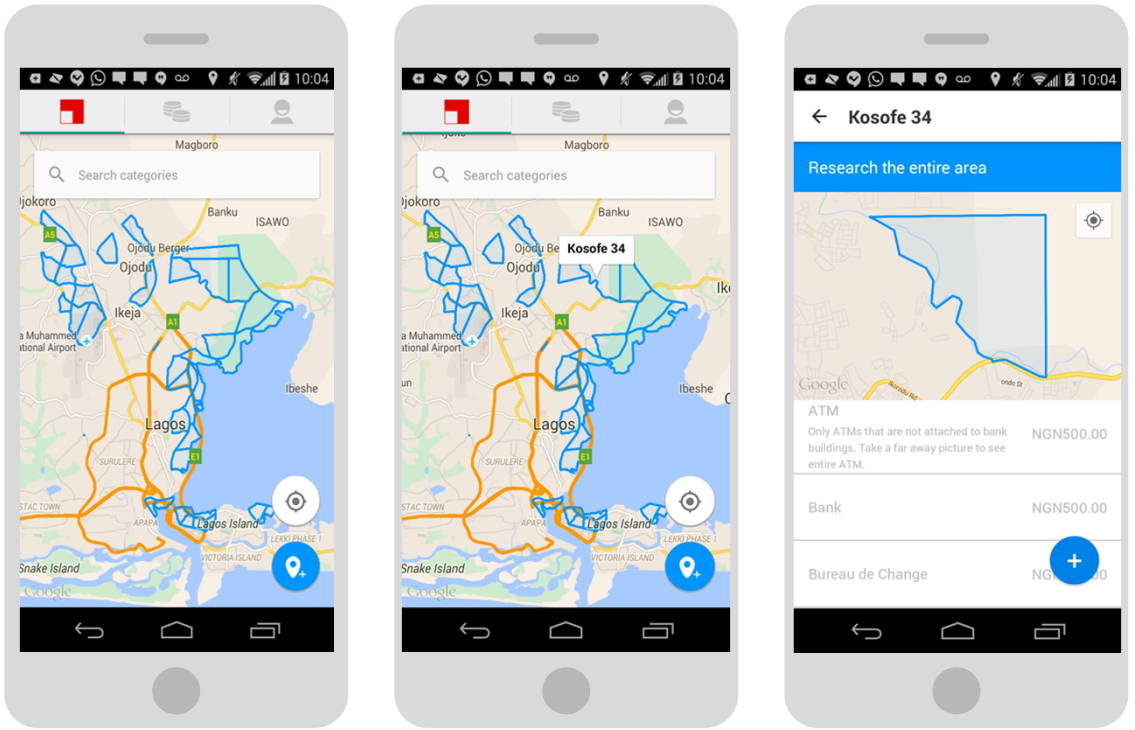


Premise Platform

# Adaptive sampling & rapid-response

- Monitor survey error and response coverage in real-time
- Overall data-collection effort is configurable: Adaptively tune survey instrument and task volume, and allocate discovery tasks in response to analytics
- Enables “rapid-response” surveys tuned to specific policy needs as well as incremental improvement of



PREMISE

Premise to provide data-gathering infrastructure adaptive sampling and survey approaches for US RPPs templated on work with World Bank ICP

**Phase 1**: Would launch in four metro areas to ensure validity of approach

- Staff with a team of Premise data scientists and engineers dedicated specifically to this program
- Build networks of data collectors expressly for the program

**Timeline**: Scoping in June/July 2016; Program launch: Q1 2017

# PREMISE