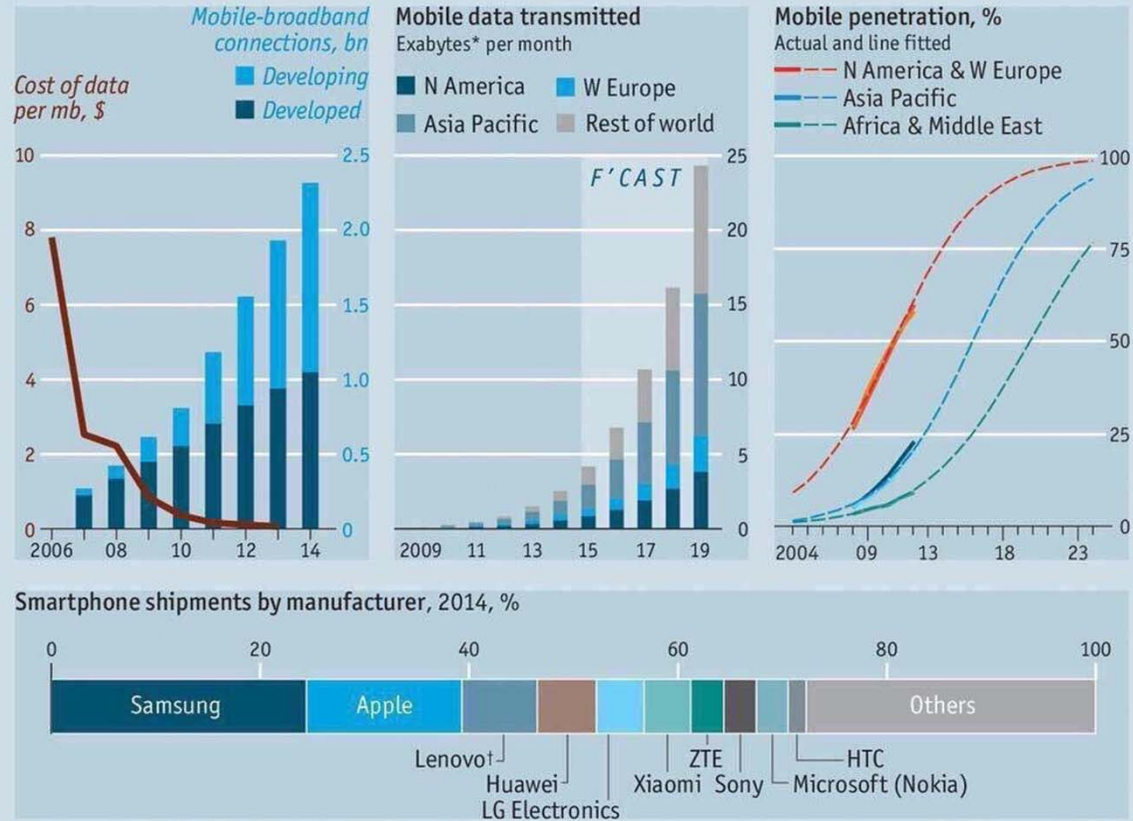




## Transformation in action

2



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

\*1 exabyte=10<sup>18</sup> bytes †Including Motorola





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

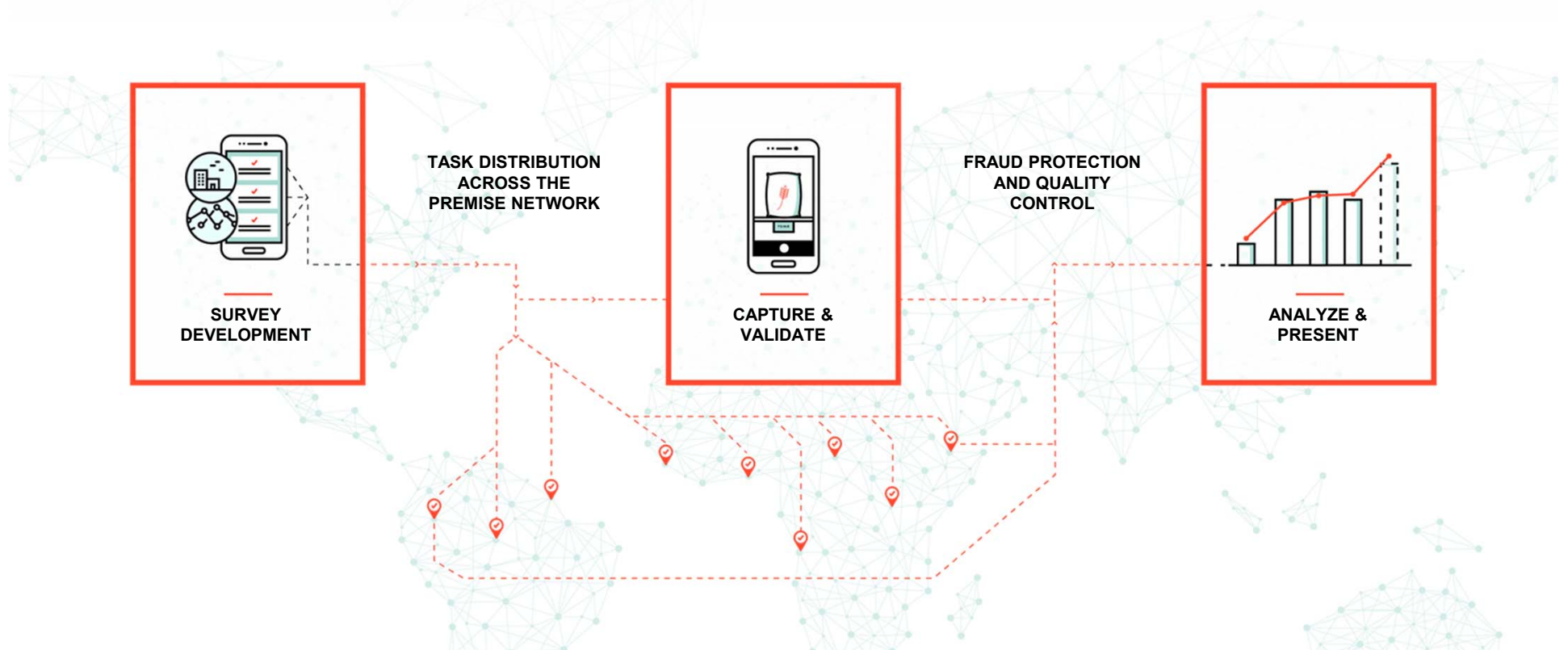


Public health  
Tax implementations  
Gender-based violence

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



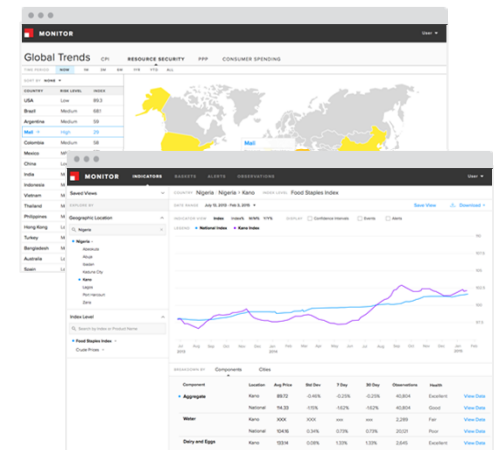
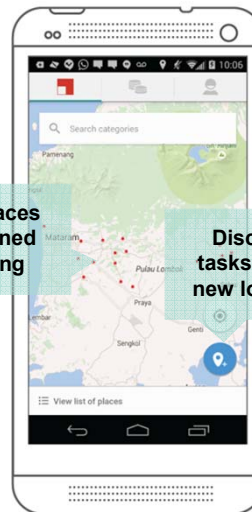
REPRESENTATIVE  
SAMPLING STATISTICS

20+ countries, 100+ Cities



Revisit places  
for sustained  
monitoring

Discovery  
tasks to map  
new locations



### Select Customers



BILL & MELINDA  
GATES *foundation*



### Independent Director

#### Larry Summers

President Emeritus & Charles W. Eliot  
University Professor of Harvard  
University

### Advisory Board

#### Raj Shah

Former Head, USAID

#### Hal Varian

Chief Economist, Google

#### Alan Krueger

Professor, Princeton University

### Investors

Valor Equity Partners

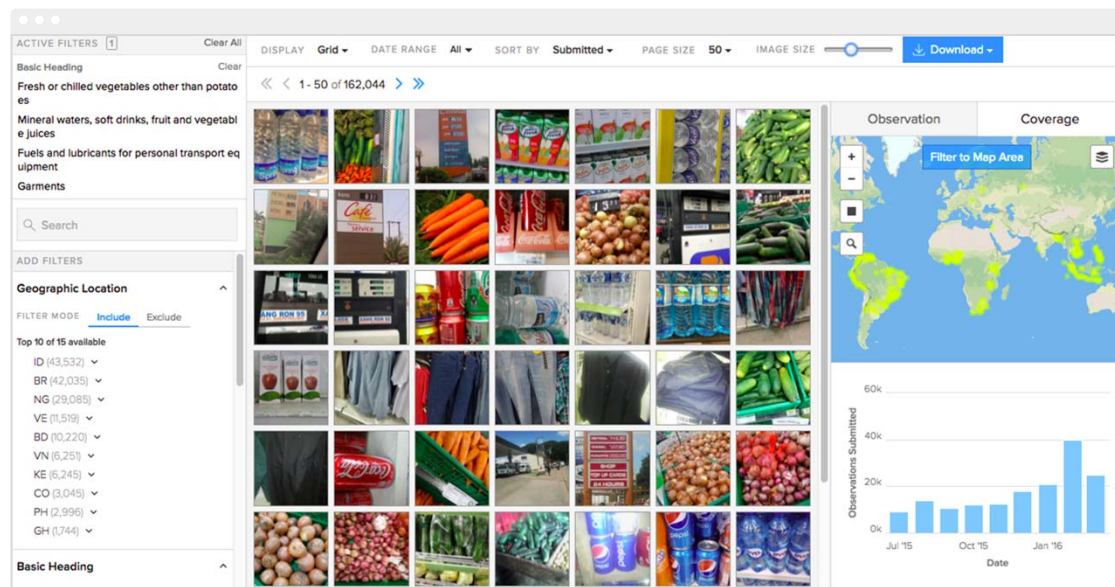
Social + Capital

Google Ventures

Andreessen Horowitz



# Augmenting Data Capture for Price Statistics



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



# Rich Attributes: quality, location, frequency

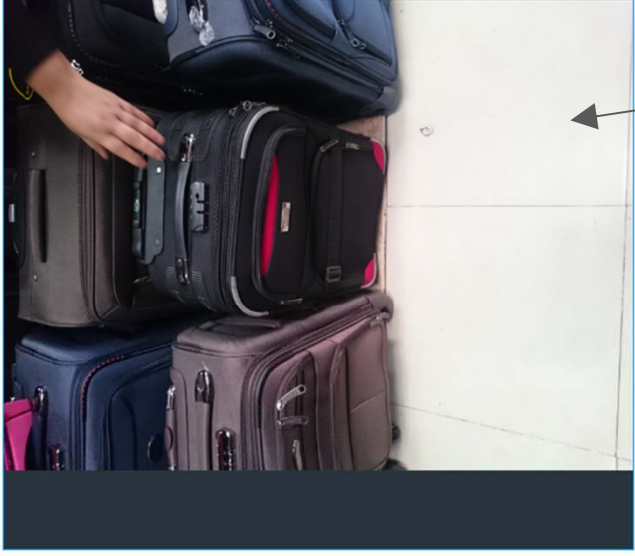
DASHBOARD

OBSERVATIONS

INDICATORS

Tools - David Soloff -

Unreviewed



Suitcase with pullout handle (soft, small, black) at APIAT

✓

✗

Edit

Feedback

Feedback Category

ENTITY

Entity Suitcase with pullout handle (soft, small, black)

ID 5bec7696-9d78-4d96-b5dd-48d4e4dfc591

PRICE

Price PEN 120 for 1.0 x <no size> <no size units>

HINTS

Main With 2 wheels

CRITERIA

Material Synthetic (not leather, not hard plastic)

Packaging Sold individually

Size 65 cm (W) x 40 cm (H) x 20 cm (D)

Type Small suitcase with pullout handle with 2 wheels, soft, black

LOCATION

Country PE

Place APIAT

ID a958c233-3bb9-49d9-9f0e-8323aa5fc320

SUBMISSION DETAILS

Name Mario Andre Villanueva Velasquez

ID a41ab48a-ad43-4952-9d37-2a4353f4c002

User Group Trujillo, PE

Created 16 hours ago (May 4, 2016 5:06:51 pm)

Submitted 6 minutes ago (May 5, 2016 9:14:21 am)

AUTOQC

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

# Rich venue coordinate and attribute data

DASHBOARD
OBSERVATIONS
INDICATORS
Tools - David Soloff -

Location

Observation Coordinates  
-8.111932754516602, -79.0224380493164  
Place  
Distance: 27m

Raw Data

```

{
  logged_action_event_id: 409882218,
  user_uid: "a41ab48a-ad43-4952-9d37-2a4353f4c002",
  submitted: "2016-05-05T13:14:21.833Z",
  user_name: "Mario Andre Villanueva Velasquez",
  user_group: "Trujillo, PE",
  uid: "5efb241c-8008-4d64-98f5-1130820c54be",
  started: "2016-05-04T21:03:53.525Z",
  created: "2016-05-04T21:06:51.582Z",
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  lang: "es",
  app_version: "1.12.10",
  campaign_id: "v1.PE.TRU.ICP.v2",
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```

DASHBOARD
OBSERVATIONS
INDICATORS
Tools - David Soloff -

Raw Data

```

{
  logged_action_event_id: 409882218,
  user_uid: "a41ab48a-ad43-4952-9d37-2a4353f4c002",
  submitted: "2016-05-05T13:14:21.833Z",
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  created: "2016-05-04T21:06:51.582Z",
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  app_version: "1.12.10",
  campaign_id: "v1.PE.TRU.ICP.v2",
  entity_uid: "5bec7696-9d78-4d96-b5dd-48d4e4dfc591",
  child_uids: [ ],
  points: 6000,
  image: "https://marketresearchco-pricespotter-images1.s3.amazonaws.com/5efb241c-8008-4d64-98f5-1130820c54be",
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  source: "offline",
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```

# Survey coverage

420

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 Restaurarant	
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

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

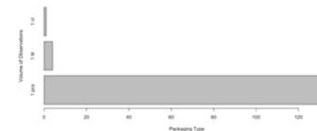
OBSERVATION COUNT  
143

PACKAGING DISTRIBUTION

REPRESENTATIVE IMAGES

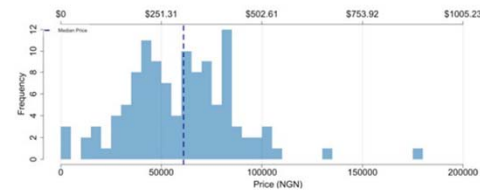
NUMBER OF CITIES  
6

AS OF  
July 24, 2015

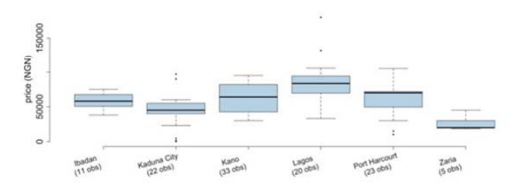


#### MOST PREVALENT UNIT SIZE : 1 PCS

OVERALL PRICE DISTRIBUTION



PRICE DISTRIBUTION BY CITY



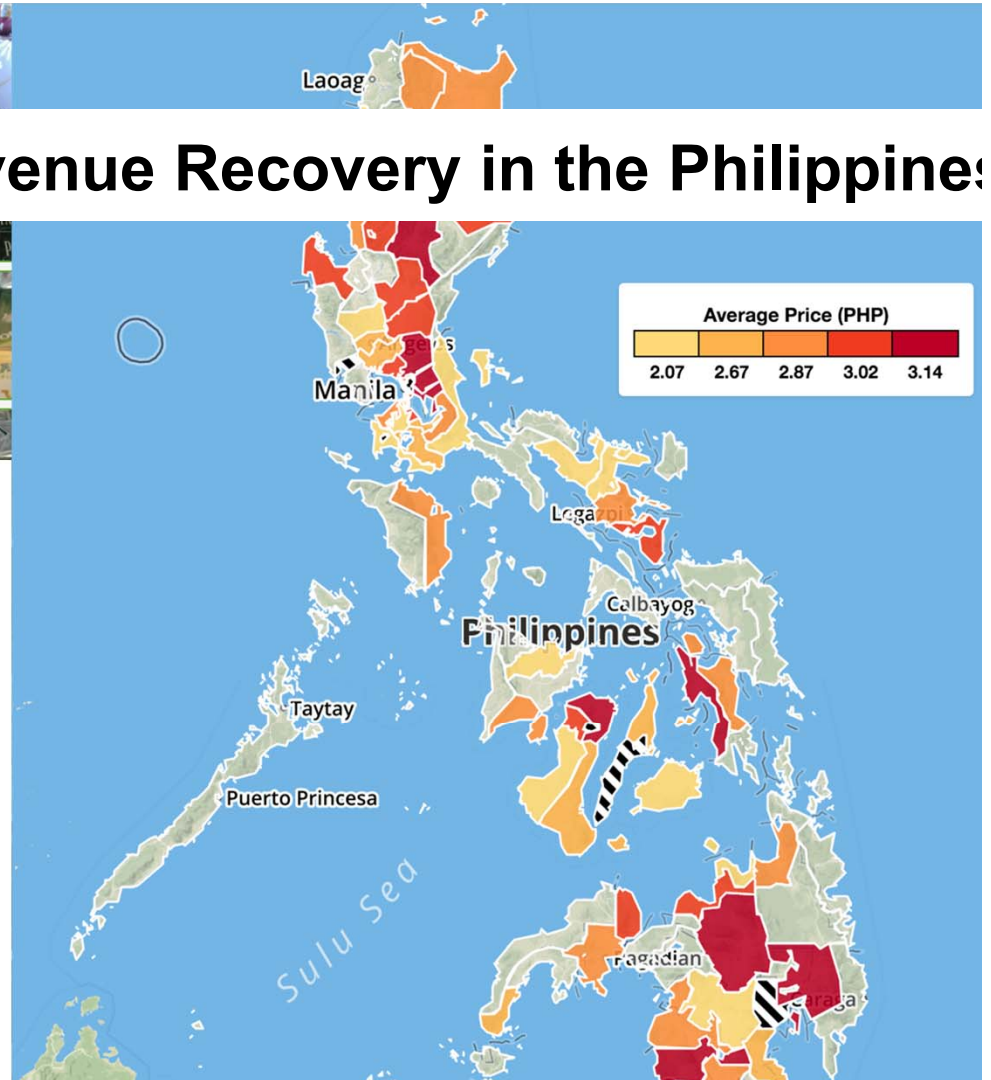
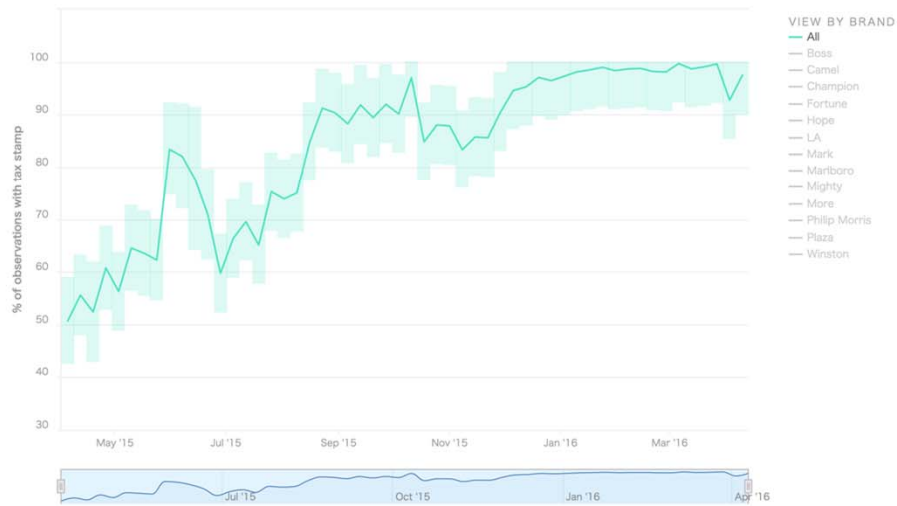
	ALL	LAGOS	KADUNA CITY	ZARIA	IBADAN	KANO	PORT HARCOURT	SOKOTO
# OF OBS	136	20	24	5	11	47	29	NA
25TH (NGN)	44375	72750	40000	20000	50500	42500	50000	NA
MEAN (NGN)	61912	82118	44731	26700	58182	65968	63110	NA
MEDIAN (NGN)	63000	83500	45000	20000	58000	64000	70000	NA
MODE (NGN)	45000	33000	45000	20000	70000	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

## Weekly Tax Stamp Presence

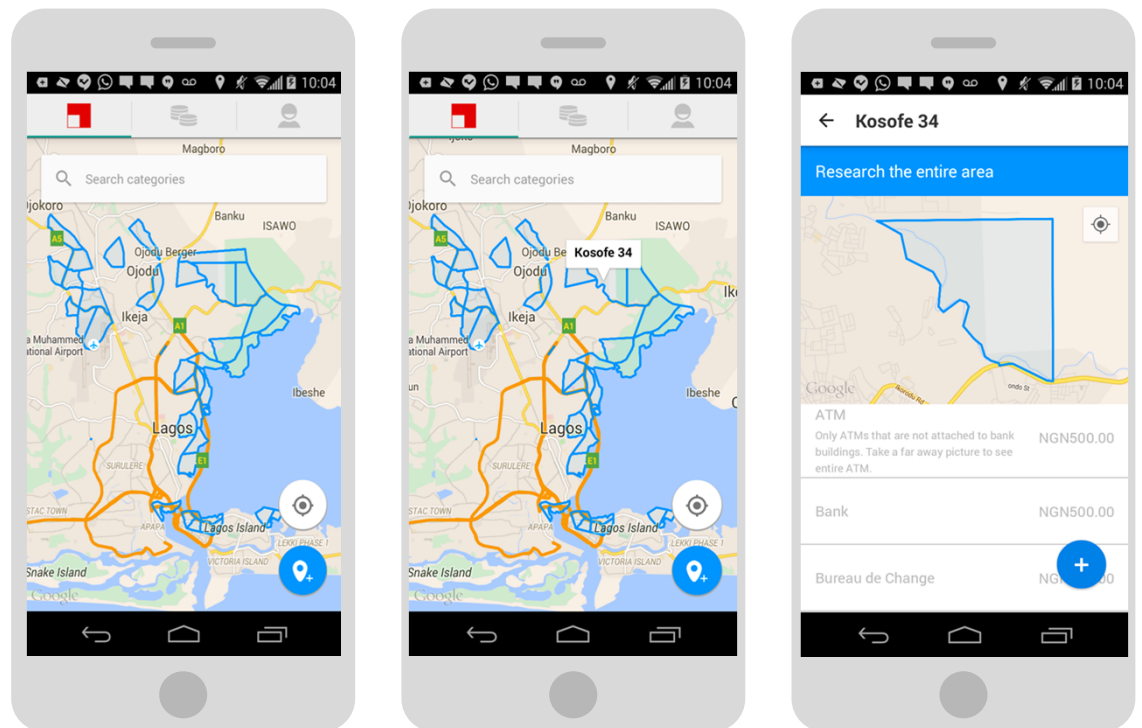
Weekly presence of the tax stamp on cigarette packages. Boxes represent the standard deviation of the binomial distribution.






## 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





## Designing a Program of Statistical Support with U.S. Department of Commerce



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

