



SHELF LIFE LOGISTICS

BEER A - AVERAGE FRESHNESS REMAINING 64.28%

BEER B - AVERAGE FRESHNESS REMAINING 58.5%

BEER C - AVERAGE FRESHNESS REMAINING 36.62%



Maximising the Impact of Appliance Efficiency Policy with Digital Tools

COMMUTE TIME

215, 45, 6, 53, 345, 234, 161



LOCATION DISCOVERED

19.077743, 72.863267

19.077766, 72.863225

19.077822, 72.863131



Premise Overview

- The Premise Platform is remote data collection and analytics software that includes access to a network of **2.2 million data collectors in 100+ countries**
- Premise is for international development organizations and governments that conduct **assessments, monitoring and evaluation**
- Unlike traditional field research methods, Premise **integrates** the people who collect the data, the process for managing collection, and the data analysis into a single **software solution** that works in **real-time**
- Unlike alternative data approaches (social media monitoring, satellite imagery, etc.), Premise provides **large scale** data collection **specific to your needs** at a price the average policy program can afford

Who is Premise

- Venture-funded technology company headquartered in San Francisco, CA. Public Sector division based in Washington, DC.
- Raised \$86 million in venture capital from renowned Silicon Valley investment firms
- 10 contracts with USAID missions and bureaus
- 20+ international development clients
- International development work complements strong Global 1,000 business client base
- Deloitte Fast 500 List - Rank 182 on list of fastest growing technology companies in the US

Clients

BILL &
MELINDA
GATES
foundation



UN HABITAT



WORLD BANK GROUP



Investors

VALOR
EQUITY PARTNERS



SOCIALCAPITAL

ANDREESSEN
HOROWITZ

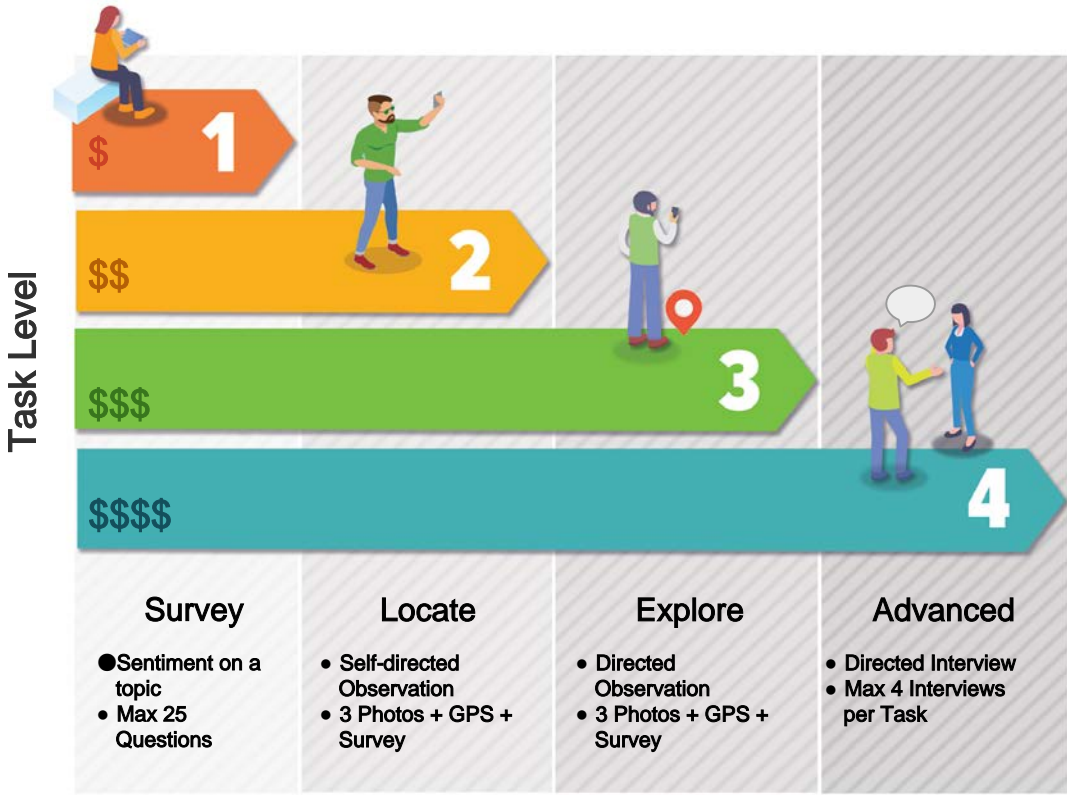


Who are Premise's Contributors?

Local Citizens Paid per Completed Data Collection Task

- Anyone can be a Premise Contributor
- Must own their own smartphone
- Contributors earn money by taking surveys and sharing local information
- Contributors are paid for each task they complete
- Contributors receive payments by connecting their mobile money account to the Premise app

Contributor Capabilities | Data Collection



Sample Tasks



Tracking and ad hoc surveys on key topics



Mapping points of interest in areas with poor geospatial data



Product and price data collection

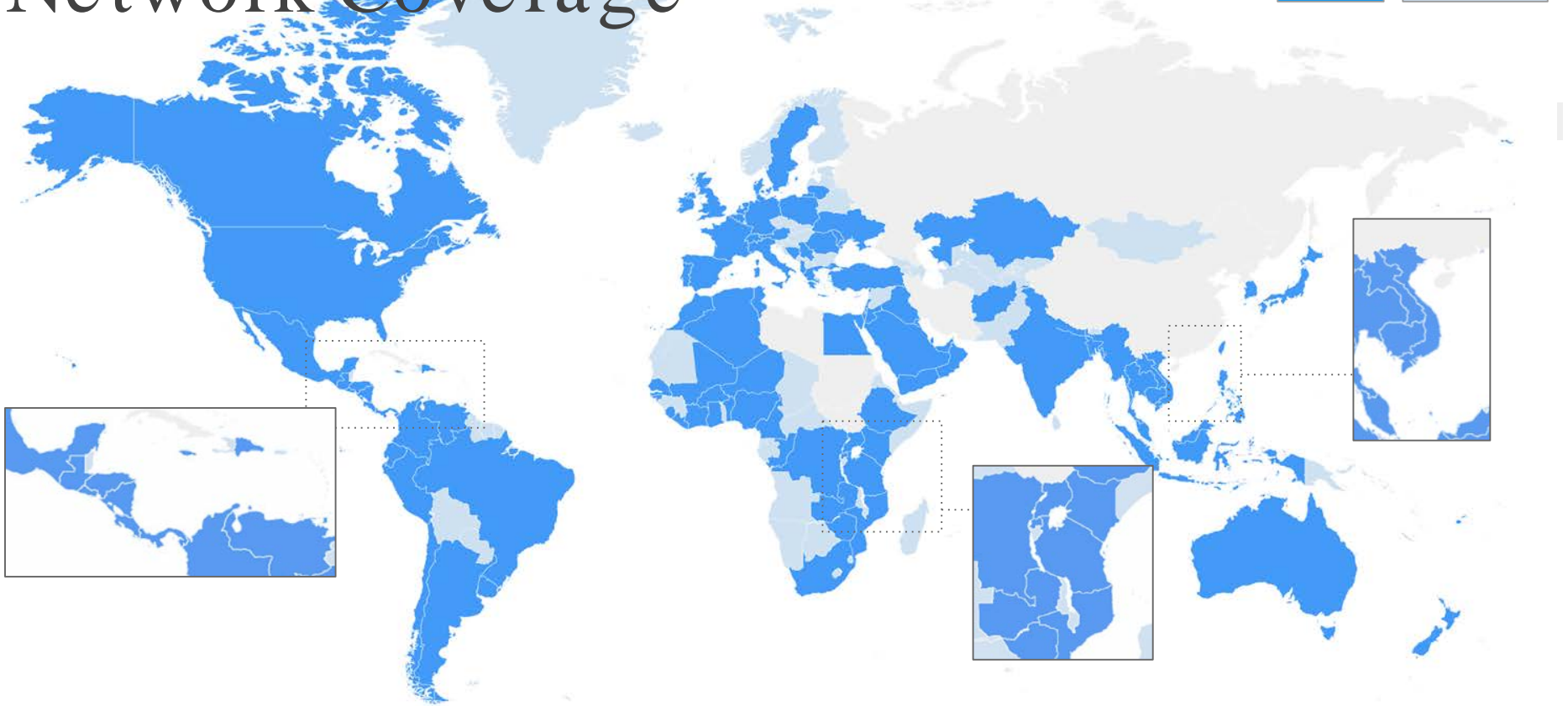


Household and key stakeholder interviews

Network Coverage

Active

Available



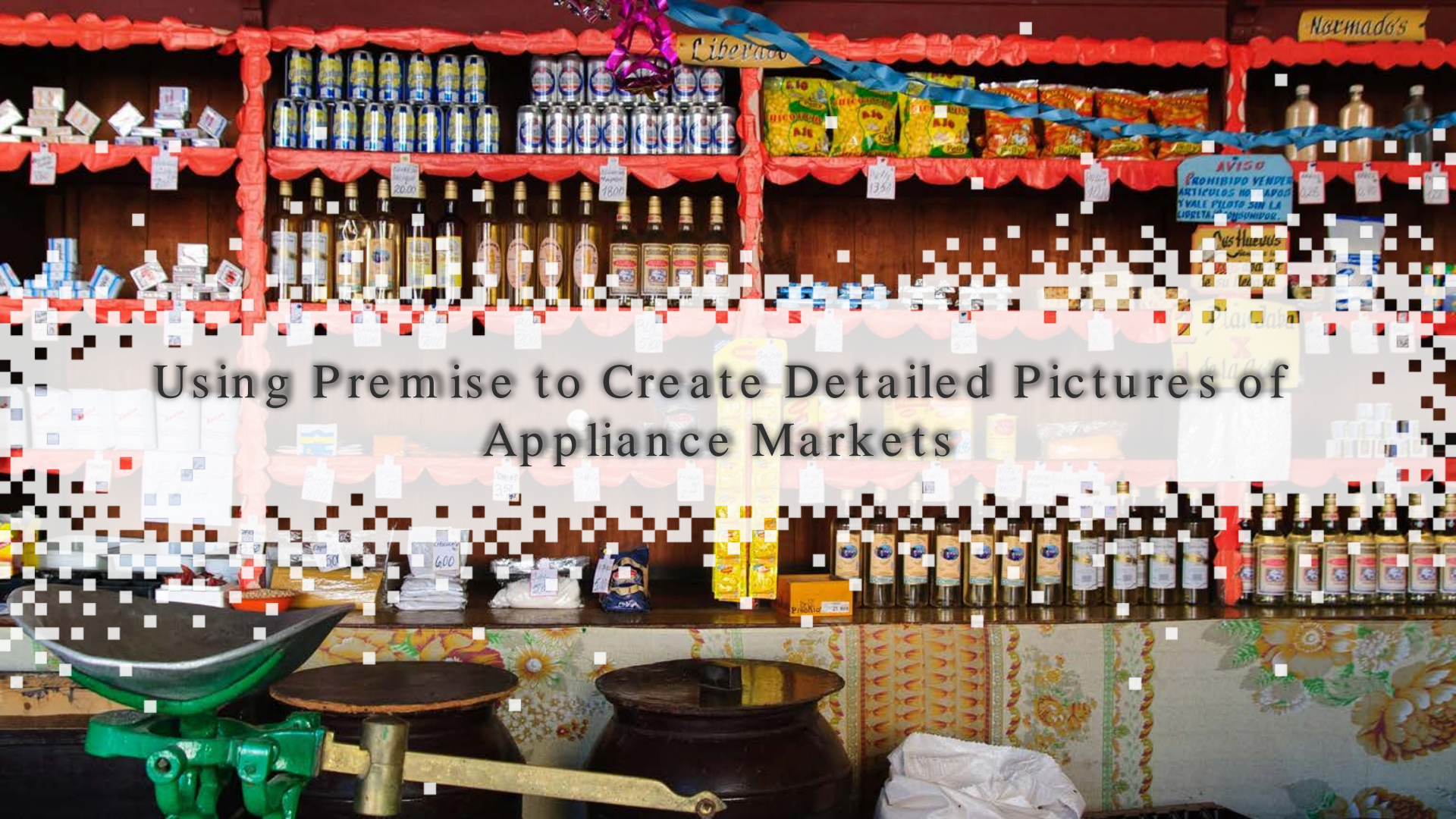
Reference Premise Network Coverage Letter (Nov 2020) for full details

100+ Countries

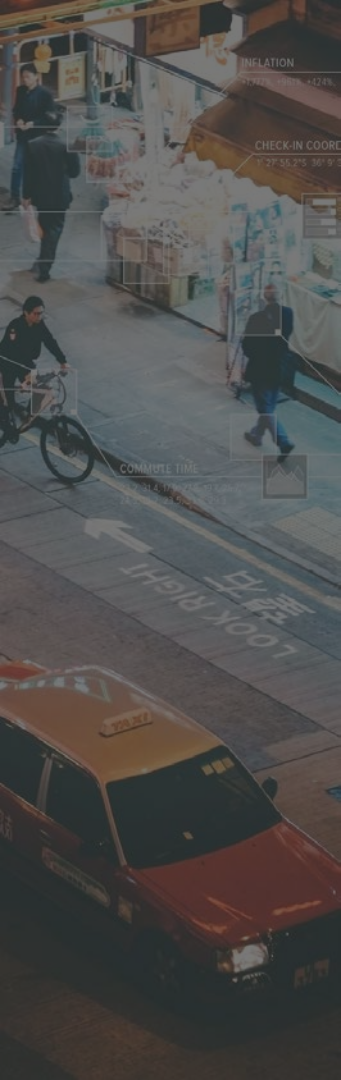
| 2M+ Contributors

| 85M+ Accepted Submissions

| Under 30 Days (avg) Add a New Network



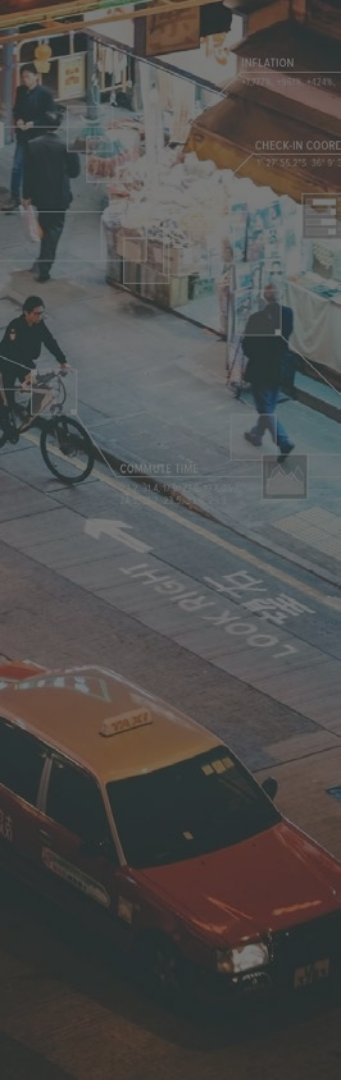
Using Premise to Create Detailed Pictures of Appliance Markets



Project Aim

- Crowdsource product data about air conditioners (AC) and refrigerators available in retail stores (large and small) in Indonesia, Thailand and Vietnam to understand the depth and distribution of available products by brands, types, pricing, availability of energy efficiency labels in each country.
- Ultimately, use the data to draft better recommendations and policymaking around energy efficiency in the region.





Sample sizes vs total data collected

Initial targets:

	Thailand	Indonesia	Vietnam	Total
Air Conditioners	1,500	1,500	1,500	4,500
Refrigerators	1,500	-	1,500	3,000
Total	3,000	1,500	3,000	7,500

Final data collection:

	Thailand	Indonesia	Vietnam	Total
Air Conditioners	1,647	1,596	1,710	4,953
Refrigerators	1,863	-	1,849	3,712
Total	3,510	1,596	3,559	8,665

Premise approach

Leverage product identification templates from other customers to build a suite of tasks for contributors in Indonesia, Thailand, and Vietnam, to identify consumer-available information on air conditioners and refrigerators pertaining to energy efficiency, technical information, purchase price, physical data and features.

Premise platform interface (Premise app)

The screenshot displays the Premise app interface. The top section shows a list of feature names with checkboxes, including 'Wifone Home Center', 'Bunak Electronics', 'Lark Jaya Electronics', 'Best Denki', 'PT Swish Accounting Indonesia', 'COOLIT'S Borneo', 'Electroned City Sinar Agung North Jakarta City', 'Eranekad - Carrefour', 'ACE HARTWARE - Mita Electronic Garden', and 'Arytha AC Dealer Westy AC'. To the right is a map of Southeast Asia with green markers indicating feature locations. Below this is a 'Task Optimization' section with a 'Time' table and a 'Projection: 2 Days' chart.

Start Date	End Date
Thu, Jan 23, 2020 17:00 UTC	Thu, Jan 23, 2020 08:00 America/Los_Angeles
Fri, Jan 24, 2020 00:00 Asia/Ho_Chi_Minh	Wed, Apr 15, 2020 10:00 UTC
Thu, Apr 16, 2020 00:00 Asia/Ho_Chi_Minh	



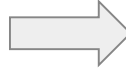
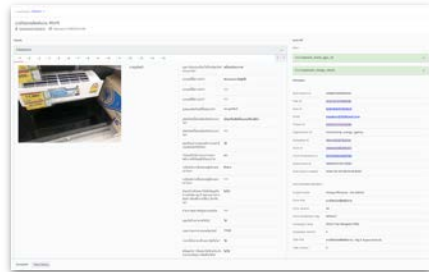
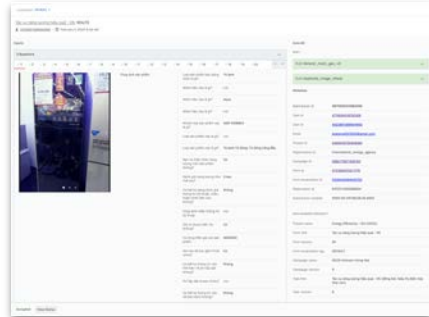
User

The screenshot displays the User interface. The top section shows a list of tasks with details, including 'ภารกิจประหยัดพลังงาน (Chang Wat Songkhla)', 'ภารกิจประหยัดพลังงาน (Chang Wat Ubon)', 'ภารกิจประหยัดพลังงาน (Chang Wat Surat)', and 'ภารกิจประหยัดพลังงาน (Chang Wat Chon Buri)'. To the right is a map showing the location of the tasks. The bottom section shows a 'เลือกบันทึก' (Select Record) button and a 'เพิ่มพื้นที่' (Add Area) button.

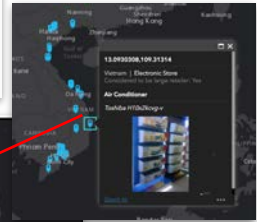
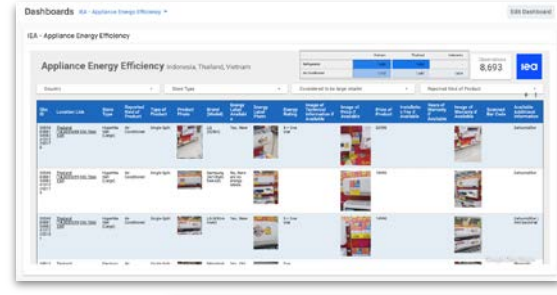
Premise approach

Data delivered through off the shelf and custom visualizations including a product catalogue, maps, and charts. OCR was used to extract key data from labels.

Premise platform tracker on Customer Portal



Visualizations





Product Type

Air Conditioners	Thailand	Indonesia	Vietnam	Total
Single-Split	1,595	1,439	1,707	4,741
Multi-Split	8	74	1	83
Window or Wall Unit	37	50	1	88
Portable	7	33	1	41
Total	1,647	1,596	1,710	4,953

Refrigerators	Thailand	Indonesia	Vietnam	Total
Refrigerator-Freezer: Top freezer	1,144	-	846	1,990
Refrigerator-Freezer: Bottom freezer	299	-	798	1,097
Refrigerator: One Door (with internal icebox)	261	-	11	272
Refrigerator-Freezer: Side-by-side	69	-	66	135
Refrigerator-Freezer: French door	30	-	51	81
Refrigerator: Compact (mini-fridge)	41	-	28	69
Freezer: Chest Freezer	7	-	39	46
Refrigerator: One door (no icebox)	11	-	4	15
Freezer: Upright Freezer (no fridge)	1	-	6	7
Total	1,863	-	1,849	3,712

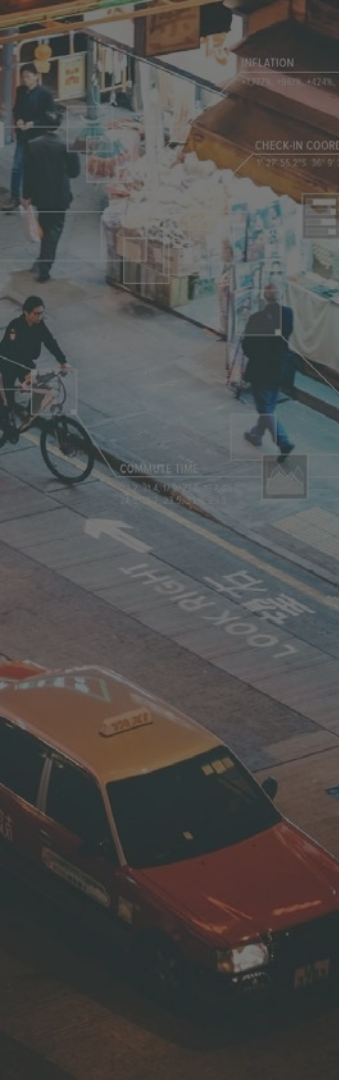
Energy label Compliance

- Most products identified in all countries and across categories appeared to include an official energy label. There was a higher compliance rate among refrigerators than air conditioners.

Air Conditioner	Thailand	Indonesia	Vietnam
Official Label	82%	83%	86%
Different Label	11%	4%	0%
None	7%	13%	14%

Refrigerator	Thailand	Vietnam
Official Label	91%	92%
Different Label	6%	0%
None	3%	8%



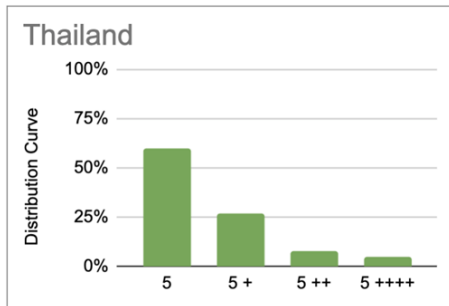


Energy label availability by brand

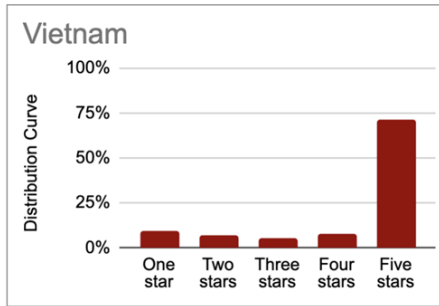
Air Conditioners	Thailand	Indonesia	Vietnam
Samsung	38%	13%	-
Panasonic	15%	4%	3%
Haier	14%	2%	-
LG	9%	15%	39%
Sharp	1%	2%	6%
Mitsubishi	5%	1%	0%
Electrolux	1%	4%	8%
Daikin	11%	17%	28%
Toshiba	-	0%	4%
Midea	-	12%	-
Polytron	-	6%	-
Other	5%	24%	12%
Total	100%	100%	100%

Refrigerators	Thailand	Vietnam
Samsung	40%	50%
Toshiba	10%	31%
LG	5%	8%
Panasonic	2%	6%
Sharp	7%	3%
Hitachi	3%	0%
Others	33%	2%

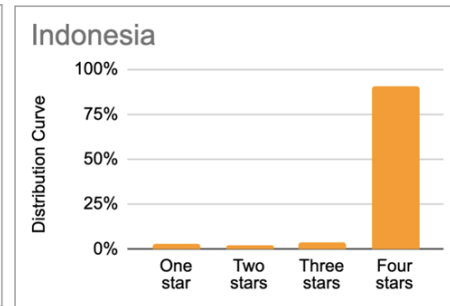
Energy rating analysis



Smooth distribution, exponentially winning.



Tight distributions where most of the population is contained within the highest ranks.





Additional data point

- Price information
- Refrigerant type
- Store type
- Some information from the technical plate



Conclusions

- Method is useful for compliance – able to get photos of labels
- Price Information
- General product information