



Getting around Ethiopia just got easier. Much easier.

[adrasha.io](http://adrasha.io)  
[eadrasha.com](http://eadrasha.com)

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Founder of E-Adrasha





# Background

By using the new blue signs the city has placed around the city. We have collected house and building address numbers and street names. We have built a database of over 60,000 location geotagged businesses, residences and public service areas in several Woredas throughout Addis Ababa;

Arada W-04	Kirkos W-02	Nifas Silk Lafto W-11
Bole W -03	Kolfe – Keranio W-07	Yeka W-13
Gulele W-05	Lideta W-02	

❖ We are also collecting other features like:

- ★ Types of Clinic
- ★ Type of Bank and Bank Branch also the ATM locations of Banks
- ★ Type of Businesses
  - **Bars, Buildings with names, Religious Centers, Commercial Retail, Cafe, Fast Food, Gas stations, Government Office, Hospitals, Insurance Office, Pharmacy, Pensions, Post Offices, Restaurants**



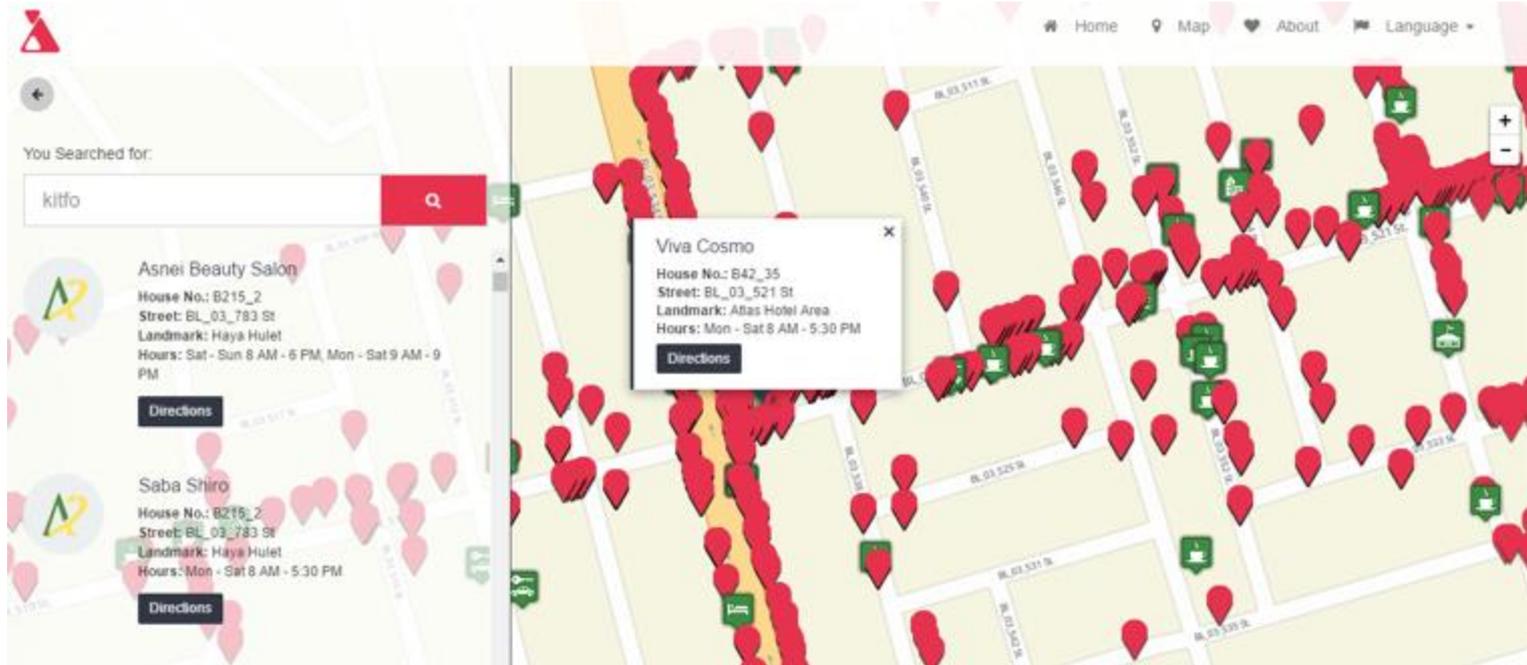
# Background

## Street Signs





# Background





# Background

## **We utilize open source products:**

-*Open Street Map* – using it as a basemap

-*Open Street Map Directions for routing*- The based on the mathematical formula used. optimization model is derived from the precise mathematical procedures that offer the best or optimum solution

-*Data collection tools* -Kobo Collect

-*Database* - Postgresql an open source object-relational database system

-*QGIS*- cross-platform free and open-source desktop geographic information system application that supports viewing, editing, and analysis of geospatial data.



# Background

## We utilize ESRI products as well

1. *ArcMap* to digitize some of the roads and create field maps for data collectors to identify which areas to focus their data collections
2. *ArcGIS Online* to create web maps to communicate data errors with the ground field crew
3. *ESRI Collector app* to give our field crew the ability to locate data and fix the error based on the data collected
4. *ESRI market place* (Future) provide geocoders and data



# Background



We developed a web client currently available at [www.adrasha.io](http://www.adrasha.io) [www.eadrasha.com](http://www.eadrasha.com) for location searches as well as routing



# Background

September 2017 on  
Google Play

**Already Available On  
Google Play Store**



## Mobile APP

We have created a mobile application as well as a web application that will give users locations in Addis Ababa. We are providing a solution for the ability for anyone to find any location in Addis Ababa, Ethiopia.

What we have done is geo-tagged locations and put those locations in a database which can be searched by categories, building names, business names or individual residential address.



# Background

Navigation: Home, Map, Blog, About, Help, Language

Showing results for:

Nearby hotel:1

- Mr. Martins Cozy Place Hostel**  
House No: Mr. Martins Cozy Place Building  
Street: BL\_03\_503 St  
Landmark: Atlas Hotel Area  
Hours: Open 24 Hours  
[Directions](#)
- Southern Addis Hotel**  
House No: B48\_24  
Street: BL\_03\_639 St  
Landmark: Atlas Hotel Area  
Hours: Open 24 Hours  
[Directions](#)

Map: ADDIS ABABA





# Benefits of Our Application



**Adrasha helps**  
businesses, the public, and government entities to  
significantly reduce transit time.



# Benefits of Our Application

Adrasha's location information for businesses, residences, facilities, tourist attractions or anything in the city is an addition to public welfare.

All users can benefit in finding commercial and public services as well as driving navigation to POIs needed, with real-time traffic information. We are providing data plus logistic services to both clients and customers.



## Transit

Real-time driving navigation routes, with traffic updates and travel time.



## Goods & Services

Efficient and updated routes for delivery and pick-up of freight, goods, and services.



## Tourism

Directions to historical and cultural sites, markets, and several tourist attractions, commercial, government locations.



# Benefits of Our Application

**Societal benefits-** Geospatial technology can play a role in emergencies—such as helping people prepare for a natural disaster by highlighting flood-risk areas.

## **Consumer benefits**

Geo-spatial Maps help increase efficiency and reduce travel time

## **Business benefits**

Maps help make small and large businesses more visible, productive and profitable. By providing useful facts such as store hours, contact information and reviews, maps help drive sales—particularly important for small businesses that may find potential new customers without incurring additional advertising costs.

*\*Reference - [www.blog.google/products/maps/economic-impact-geospatial-services/](http://www.blog.google/products/maps/economic-impact-geospatial-services/)*



## Multilingual

Adrasha currently supports English and Amharic,  
and plans to include additional language support



# Possibilities of our data use

## **Emergency -Route Optimization for emergency management agencies**

- Determining locations as well as best route for getting to fire emergencies
- Ambulance services for hospitals

**Utilities Based services** - Assist tracking in water leakage and problems ....and electrical issues For instance for Addis Ababa Water Authority and The ELPA

**Logistic/shipping and tourism markets**- Improving local delivery by the Ethiopian Post Office, DHL, FedEx or Local Shipping EMS and Ethiopian tourism agency.



# Benefits of Our Application & Data

## Government agencies that could use our application and data

1. **Ethio-Telecommunication**
2. **Ethio-Electric**
3. **Ethio-Water**
4. **Government Rental Houses and Kebele houses**
5. **Logistic and local postal services**



# Benefits of Our Application & Data

**Type of Services or applications can be developed with our data and app**

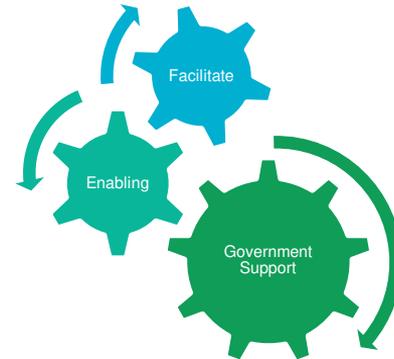
- i. Call centers can locate their clients (households) to find where there are shortages and send the contractor or inspector to the right house without having to guess where the house is located**
- ii. Our data can be used to identify areas that experience utility outage like internet outage to identify the cause and quick response.**
- iii. We can develop a database for all assets that will be used to track where their assets are located and the condition of the assets**
- iv. Identify houses that are under government rental houses and find which houses need repairs and which houses are up for rental**



# Ways Forward

## Government Support

- Facilitate in obtaining data capturing
- Facilitate collaboration from other government bodies
- Collaboration on projects for public welfare utilizing geospatial information on Water, Electricity, & Telephone





# Future Possibilities

- Our application makes ecommerce possible (refer to amazon, Uber and other services are possible due to availability of location information)
- We can support **Private Industry** which will grow by using our application
- Meter Taxi Services
- Delivery Companies (companies like Delivery Addis and others)
- Logistic Companies (DHL and other small companies)



# WHAT IS NEXT

- SCALING UP

- Currently, the data is collected in Addis Ababa only. We would like to expand to the other parts of regional cities like:

1. Awasa
2. Adama
3. Bahir Dar
4. Mekele
5. Harar

- SCALING UP REQUIRES INVESTMENTS

We are using this project as a pilot and we plan to scale this up to the rest of the African Cities. We believe that we should not wait for Google to invest in our cities/countries because we have the people with the abilities to create useful applications.



Questions ?

Thank You!



**AWAKENED MINDS**  
THE africa WE WANT

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