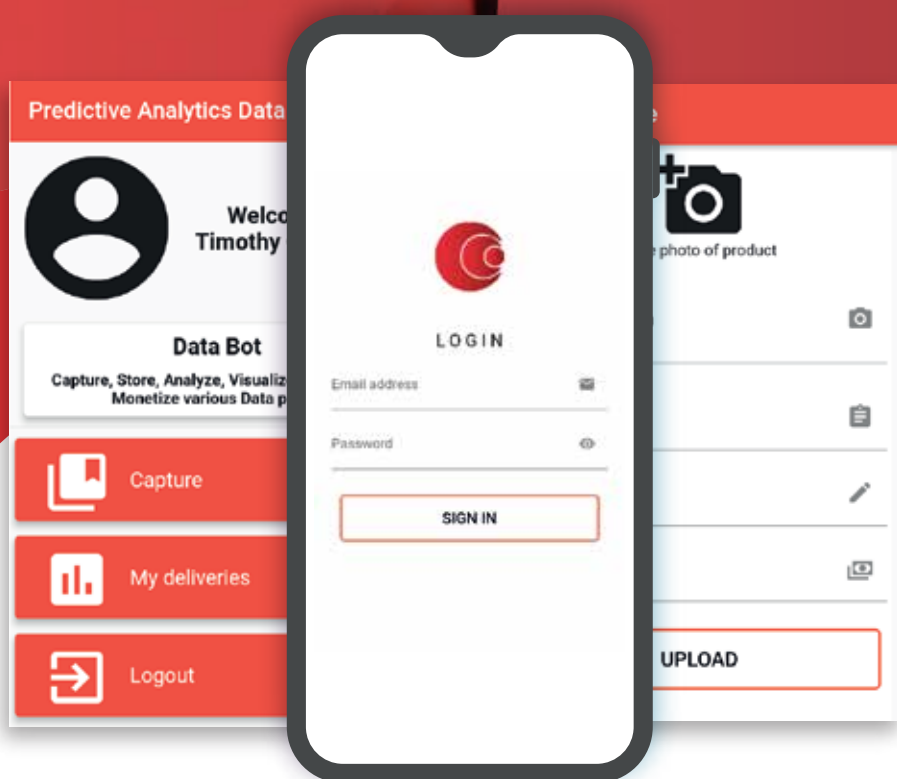


Predictive Analytics
Drilling sense out of data

Location Intelligence Platform



Capture, Store, Analyze,
Visualize, Decide & Monetize
various Data Points



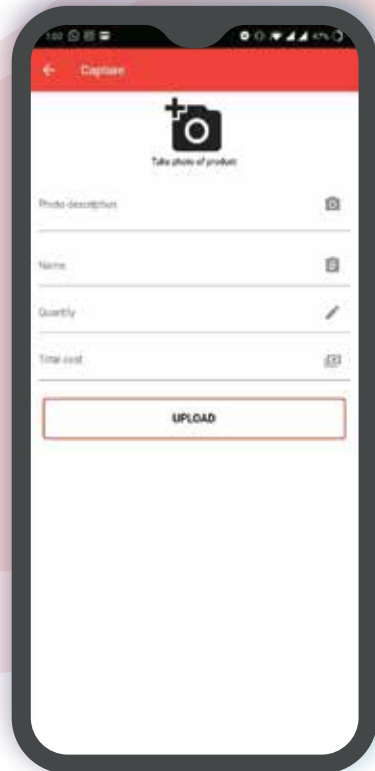
ABOUT THE PLATFORM

This Platform empowers organizations to visualize location information in any specified geographic location automatically thereby enhancing decisions for your brand, service, product, or organization.

3 Dimensions

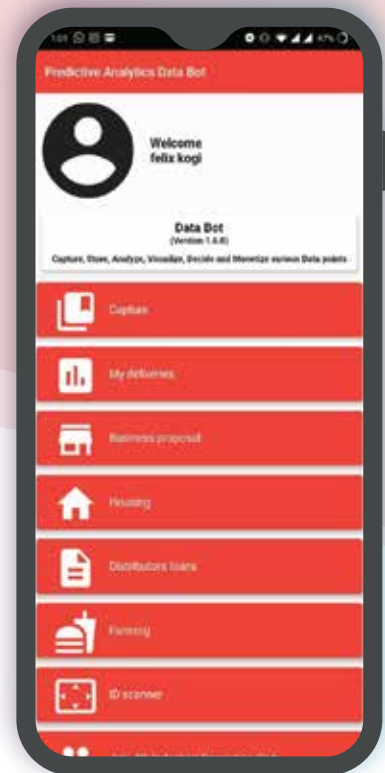
Gather and View:

The platform is interlinked with our mobile app and has the capability of gathering a wide spectrum of data across a diverse geographical locations and interlay with multiple layers of data to give a more precise view of information.



Visualize and Analyze

Using various cutting edge visualization formats, the system infuses models into graphical mapping displays, built-in analytics with an easy user interphase like drag and drop to identify, curate and understand relevant insights for your organisation.



Strategize and Act

The inbuilt Machine Learning recommender engine enables a telescopic view into the future to guide effective strategies, informed decisions and proactive strategies.



SECTION 2

Specific Use Cases

Well in the prototype it is more or less the same, we tried to build the base pipelines in the given time. But coming to concept, we could think more and we got more ideas that could be relevant from a banking perspective and here they are:

1. Finding the best Location for business, invest in property

The platform provides you with types of businesses around mapping with these other demographic and economic information. One can be able to tell you where exactly you need to locate a business, service, rent a house, buy land, invest in property or select a service.

2. Finding the best location for new Branch

Similar to the way we can find the best location to place an ATM, similarly we can also find a place where we should start a new branch. The platform has other business information, with this information one can find the locations where there are other businesses not your business and strategically place it.

3. Recommendation Engine for Advertising

Based on the locality we can also figure out what is the best advert to put there:

- If there are more malls, it could be a credit card advert
- If there are more new constructions and real estate agencies, it could be a home loan advert
- If there are more schools/universities it could be an education loan advert and many more possibilities.

4. Tracking sales and marketing team and mapping them to maps for region wide overall view

Once we scan a region around the business location, and generate leads of business around the branch or selected region.

Assume that there are 10 restaurants around the business now we check of all these hospitals how many are our customers and not our customers and what products do they could get from your business.

5. Deciding the number of employees needed in a branch/ business

Each branch might not be of the same size. Now that we know the locality and size of business in that locality, we can even decide the number of employees to put in that branch, so that we reach out to maximum customers.



6. Business consulting to assist SMEs in Understanding the landscape of economy world-wide

The platform can mark import and export across the world or select location and also map agriculture manufacturing, manufacturing across the world and know the prices of all products across the world, The insights generated from the platform can enable a bank create a weekly business seminar or open a new counter where we can explain our customers the business opportunities world wide and how we can assist them with short term (Weekly loans) to long term (Yearly Loans).

7. Generate sales journey plans: plan your recruitment

The platform provides optimized routes for the selected business to cover and also provide manager an option to track the movement of the sales team across the region there by having a real time insight on the progress.

If there are 200 stores to cover in a month, you will be provided with information on number of sales man required for covering 200 stores in a week /month and the HR team will know how many people need to be recruited.

8. Right sales man for the right business

Over time as we gather information about different sales people and their performance we will build an analytics system that will automatically assign the right sales person to speak to the right business.

So our customers need not just be SMEs or merchants it could be a school which is looking for higher interest deposits, it could be an individual shopping in malls, it could be a shop in a mall looking to expand, It could be an opportunity no one is aware of and we know it and would encourage people to think in the new opportunity direction and help them with required credit.

Our platform is embedded with Demographic Data, Economic Data, Risk Data, Machine Learning Algorithms Deep Learning Algorithms, Analytics and Domain expertise which when combined with your internal data, the resulting use cases are astounding.



SECTION 3

Implementation Overview

The Business Diagnosis Platform will contain the following components:-

- I. Data Collection through mobile app and excel uploads. 3 weeks
- II. Database design Storage on cloud and on premise 1 week
- III. Data Analysis and Visualization 3 weeks

Data Collection

Data Collection is the foundation pillar of the Platform since it will be where the data about the business performance will be collected. Data can be collected by a number of methods including Mobile Application, Excel, Data Collection Templates and Direct access to systems.

Data Storage

Data Storage involves keeping the business performance data in a structured SQL database to enable analysis and calculations to be done on the data stored.

Data Analysis and Visualization

Data visualization layer will be used to communicate the business performance and overall business health by use of Maps graphical representations such as Maps, Data grids, Charts and graphs.

Solution Architecture

DATA COLLECTION



Excel Dumps
Census

Excel VBA Data

Database

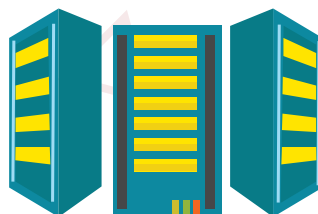


Mobile App

Data collected from multiple sources Including Mobile App

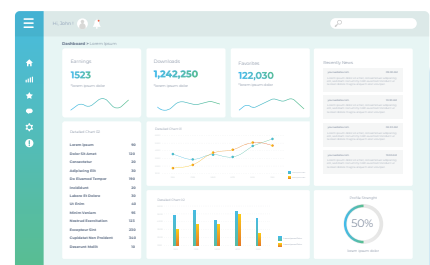
DATA STORAGE

Data warehouse Platform



Data Stored in Centralized SQL and Mongo DB Database

DATA ANALYTICS & VISUALISATION



GIS Location Data Business Locations
Business Performance Data shown in KPI Dashboards



SECTION 4

RANGE OF DATA

This Platform empowers organizations to visualize location information in any specified geographic location automatically thereby enhancing decisions for your brand, service, product, or organization.



Social and Economic Development:

- Demographics and Key Indicators Mapping and Analysis Points of Interest
- Mapping out local, international, government and Private sector information and assets location based.

Transportation:

- Routing
- Location analytics and travel time analysis
- Planning of road networks and feasibility studies

Market Research:

- Retail and Consumer Insights (Areas to target their goods and services, businesses etc.)
- Location Intelligence Solutions (Distance to market centers)
- Data Collection analysis
- Demographics and Market Insight
- Market Penetration and Trade Area Analysis (Buffer POI)



Weather and climatic variables:

- Rainfall data by NOAA National Weather Services
- Rainfall predictions with weather stations from
- Temperature (°C)
- Precipitation (mm) (
- Wind (m/s)
- Relative Humidity (fraction
- Solar (MJ/m²) (
- Soils, Lithology, Soil PH
- Digital Elevation Models

Demographics and Indicators:

- Poverty rates for Rwanda
- Population Density Rwanda
- Population projections, rural, urban, total (2010 -2100)
- Villages, Towns, Major Towns
- Roads, Rivers, Protected Areas
- Natural Disaster Data Locations past

Crops and GIS Data:

- Yield for major crops (Maize, Wheat, Sorghum)
- Variables that can be mapped are: Total Area, Irrigated Area, Rain-fed Area, Production and Yield

Web Mapping:

- Web maps of location of Such as grain silos, points of interest
- Web mapping platforms to report any incidents related to agriculture, yield, as well as food security as theft etc. Or maybe a request for services.

Interaction Analytics

We propose this solution to MCG for Real time analytics can be used to;

- Unlock insights, improve efficiencies and increase revenue while delivering great customer experience.
- Enhance the customer experience with automated real-time feedback
- Maintain compliance through 100% monitoring
- Reduce costs by driving operational efficiencies
- Increase revenue through sales or collector effectiveness

Machine Learning uses both speech and customer engagement analytics solution automatically analyses contacts across all communication channels: calls, chat, email, and social.

Real-time monitoring and post-call analytics delivers actionable insights to contact centre staff, business analysts, and executives. The results include:

- Sales
- Customer Experience
- Regulatory Compliance
- Operational Efficiency
- Improved Agent Performance



SECTION 5

SYSTEM REQUIREMENTS

This Platform empowers organizations to visualize location information in any specified geographic location automatically thereby enhancing decisions for your brand, service, product, or organization.

Requirement	Specification
Operating system	All Operating Systems for gis.predictiveanalytics.co.ke Android for Mobile Application
RAM	Minimum: 8 GB
Disk space	<p>A minimum of 1GB used by the database storage for the database instance that will hold the SQL Database Platform.</p> <p>For all databases, the size will increase over time. Ensure that you have sufficient disk space for future requirements.</p>
Web browser	<p>Express supports the following Web browsers:</p> <ul style="list-style-type: none">• Microsoft Internet Explorer version 7.0• Mozilla Firefox 3.0 or later• Google Chrome



SECTION 6

FINANCIAL BUDGET

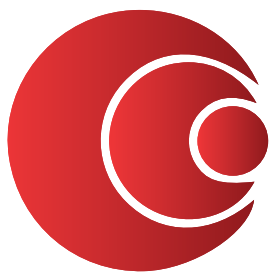
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Description	Costing (Usd)
Mobile App Interphase Design and Module Allocation	
Development of a Database	
	40,000.00
Deployment and Hosting of Business Diagnosis Dashboard Platform for future clients to use	
Totals	40,000.00

Notes

- Pricing exclusive of VAT and other government related taxes.
- Pricing includes support and maintenance of the Location Intelligence Platform environment for 1 year. An additional 20% of the quoted price for annual maintenance and remote support.
- A Royalty of 25% of client fee on additional client clusters created on the platform.
- Initial Payment of 35% of the total project costing to be paid before platform deployment begins and 40% on completion of testing then balance of 25% to be paid on completion of the deployment.





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