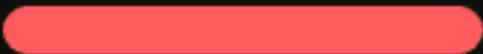




Village
Data
Analytics


Building the data infrastructure to
improve the lives of 2 billion people





Step back and imagine a world that we know almost nothing about:

The rural areas in developing regions, such as Africa, home to 2 billion people.



Where do they live?

How big are villages?

Do they have electricity?

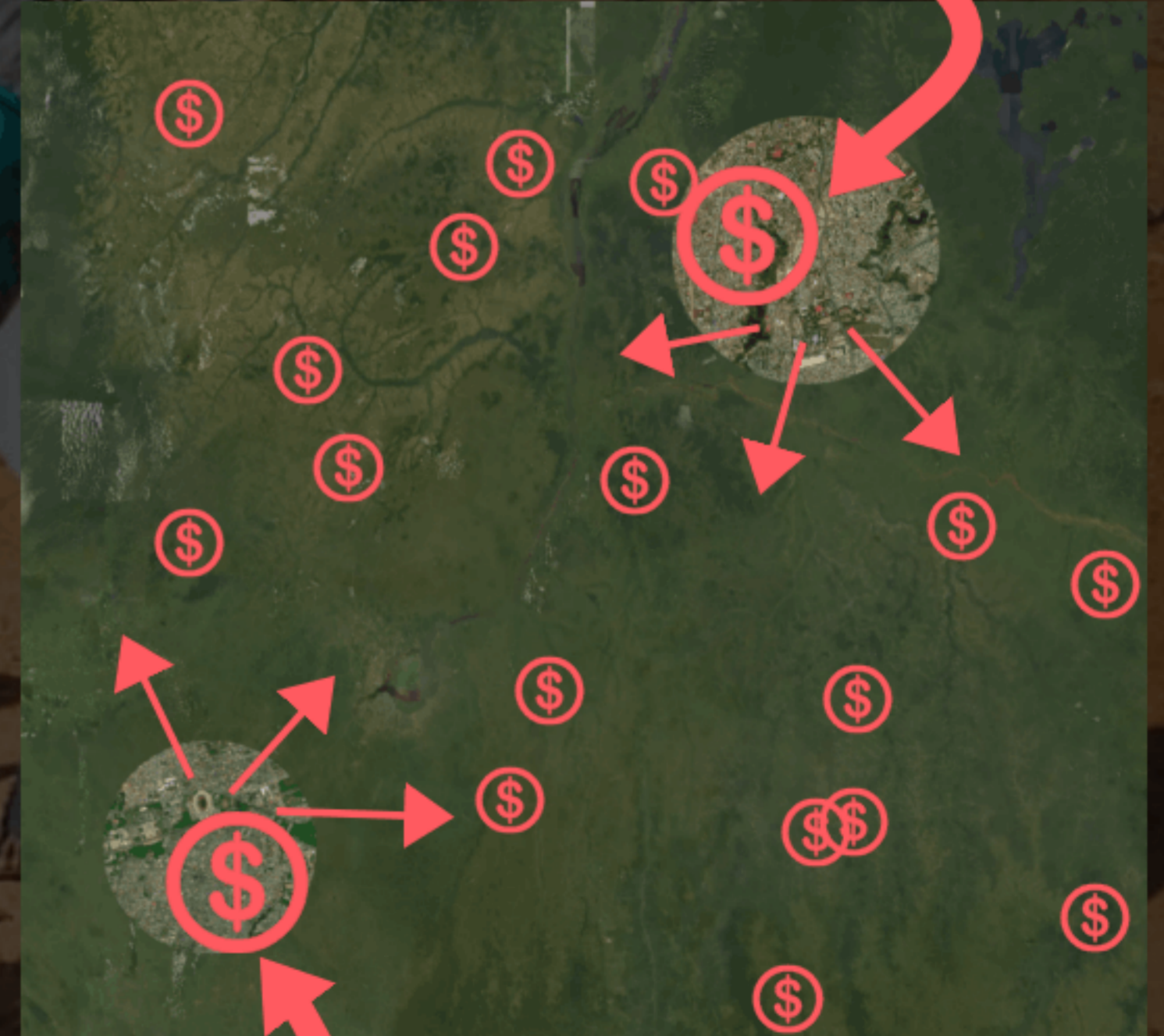
How accessible are they?

What are income sources?

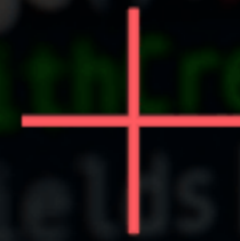
Without data, investment intended for villages gets stuck in cities (ca. \$40bn p.a.)

Companies need data for faster, better investment decisions and to scale solutions

Development organisations and governments need data to better plan infrastructure and deploy funds at scale



Village Data Analytics (VIDA) creates the data infrastructure for rural investment at scale



We create **digital twins** of villages - **anywhere in the world** - with our satellite imagery and AI-derived algorithms.



Our customers make them "their" digital twin by **adding own datasets**

Faster
planning
(>10x)

Cost
reduction
(80%)

More
accuracy
(from
50 to
90%)



In 5 years, VIDA will be the standard data software for the remote village economy around the world

By managing and monitoring investments, risks and opportunities, and connecting villages to the global digital economy, we will enable sustainable development in a market of 2 billion people

Our bridgehead market is access to energy (the cornerstone of economic change)

Telco,
healthcare,
education...

\$2,000bn by 2030 (1)

Investment in
infrastructure in rural
areas of developing
countries

**\$200bn by
2030 (2)**

Energy
access

**\$100bn
by 2030**

Renewables grid integration (step 3)

**\$50bn
by 2030**

Solar home systems (step 2)

**50bn
by 2030**

Mini-grids (current market)

(1) For comparison: Global "Official Development Assistance" (ODA) is ca. \$160bn p.a.; total infra investment in Africa is \$77bn p.a. ([link](#)); (2) see Rockefeller/Shell ([link](#))

VIDA User Interface (1)

VIDA automatically identifies rural villages and extracts key information, anywhere in the world

The screenshot displays the VIDA web application interface. At the top, the logo for 'Village Data Analytics' is visible, along with the user name 'Nabin Raj Gaihre' and a 'Log out' button. The main header indicates the project: 'THE WORLD BANK | LEAST-COST MINI-GRID VILLAGES' for 'Sierra Leone'. A 'Hide filters' section contains various filter buttons such as 'Chiefdom', 'Region', 'District', 'Has a health center?', 'Number of health centers', 'Has a school?', 'Number of schools', 'Distance to proposed grid', 'Priority', 'Number of buildings', 'Distance to grid', 'Ratio of built-up area', 'Travel distance to closest district headquarter', and 'Travel time to district headquarter'. Below the filters, it shows 'Showing all villages (587)' and 'favorite villages (0)'. A 'Download' button is present. The main content area features a ranked list of villages, each with a satellite image, name, location, priority, distance to grid, number of buildings, and ranks. The list includes: Daru (Eastern, Kailahun, Jawie), Koindu (Eastern, Kailahun, Kissi Teng), Buedu (Eastern, Kailahun, Kissi Tongi), and Kukuna (Northern, Kambia, Bramaia). On the right, a map of Sierra Leone shows numerous red dots representing village locations. A search bar is located in the top right corner of the map area.

Filters to create own shortlist

Village locations

Ranked long list of villages

Village Name	Location	Priority	Distance to Grid (KM)	Number of Buildings	Country Rank	Regional Rank
Daru	Eastern, Kailahun, Jawie	HIGH PRIORITY	28.4	2,035	1	1
Koindu	Eastern, Kailahun, Kissi Teng	HIGH PRIORITY	30.5	1,103	2	2
Buedu	Eastern, Kailahun, Kissi Tongi	HIGH PRIORITY	20.0	1,151	3	3
Kukuna	Northern, Kambia, Bramaia	HIGH PRIORITY	3.0	557	4	1

VIDA User Interface (2)

Customer adds own data (e.g. from surveys or sensor), creates analyses, and tracks progress

Images, videos, and notes taken during survey are included in the digital twin

APIs connecting to sensor data further enrich the digital twin and allow for monitoring of assets

Users create their own analyses

Village Data Analytics

Log out

← Back to results

Buedu Eastern region, Kailahun district, Kissi Tongi chiefdom

Country Rank: 8 Regional Rank: 5

Status: Survey Complete [Edit Data in QGIS](#)

Geospatial Data | Survey Data | **Analysis**

Households and commercial demand - Buedu

Commercial Households

Time	Commercial	Households
08:00:00	0.1	0.1
08:30:00	0.1	0.1
09:00:00	0.1	0.1
09:30:00	0.1	0.1
10:00:00	0.1	0.1
10:30:00	0.1	0.1
11:00:00	0.1	0.1
11:30:00	0.1	0.1
12:00:00	0.1	0.1
12:30:00	0.1	0.1
13:00:00	0.1	0.1
13:30:00	0.1	0.1
14:00:00	0.1	0.1
14:30:00	0.1	0.1
15:00:00	0.1	0.1
15:30:00	0.1	0.1
16:00:00	0.1	0.1
16:30:00	0.1	0.1
17:00:00	0.1	0.1
17:30:00	0.1	0.1
18:00:00	0.1	0.1
18:30:00	0.1	0.1
19:00:00	0.1	0.1
19:30:00	0.1	0.1
20:00:00	0.1	0.1
20:30:00	0.1	0.1
21:00:00	0.1	0.1
21:30:00	0.1	0.1
22:00:00	0.1	0.1
22:30:00	0.1	0.1
23:00:00	0.1	0.1
23:30:00	0.1	0.1
24:00:00	0.1	0.1

Energy demand

Number of connections	1,574
Connections (large:medium:small)	10:20:1544
Connection rate	92 %
Estimated energy demand: ..	651 kWh/day

Distribution grid

Number of poles	322
length of trunk lines	16.4 km
length of dropdown lines	48.7 km
Total connection cost	422,759 \$

Generation asset

Solar PV capacity	446 kWh
Battery storage capacity	3,107 kWh
Diesel generator capacity	1,000 kWh
Total Asset cost	800,000 \$

[Edit Input Values](#)

Date: 01.04.2021
Energy Demand: 2.4 kWh/day

Description
Shop with a 2 fridges and a TV

Market Validation

VIDA is **online since February 2021**

>20,000 villages analysed with VIDA

in 15 countries, on 3 continents

catalysing **investments of >\$1.5bn.**

160 active users on the platform

Existing revenue

B2B customers



B2G customers



Framework agreement to enter several new African markets with largest customer (World Bank).



Business Model: Software as a Service (SaaS)

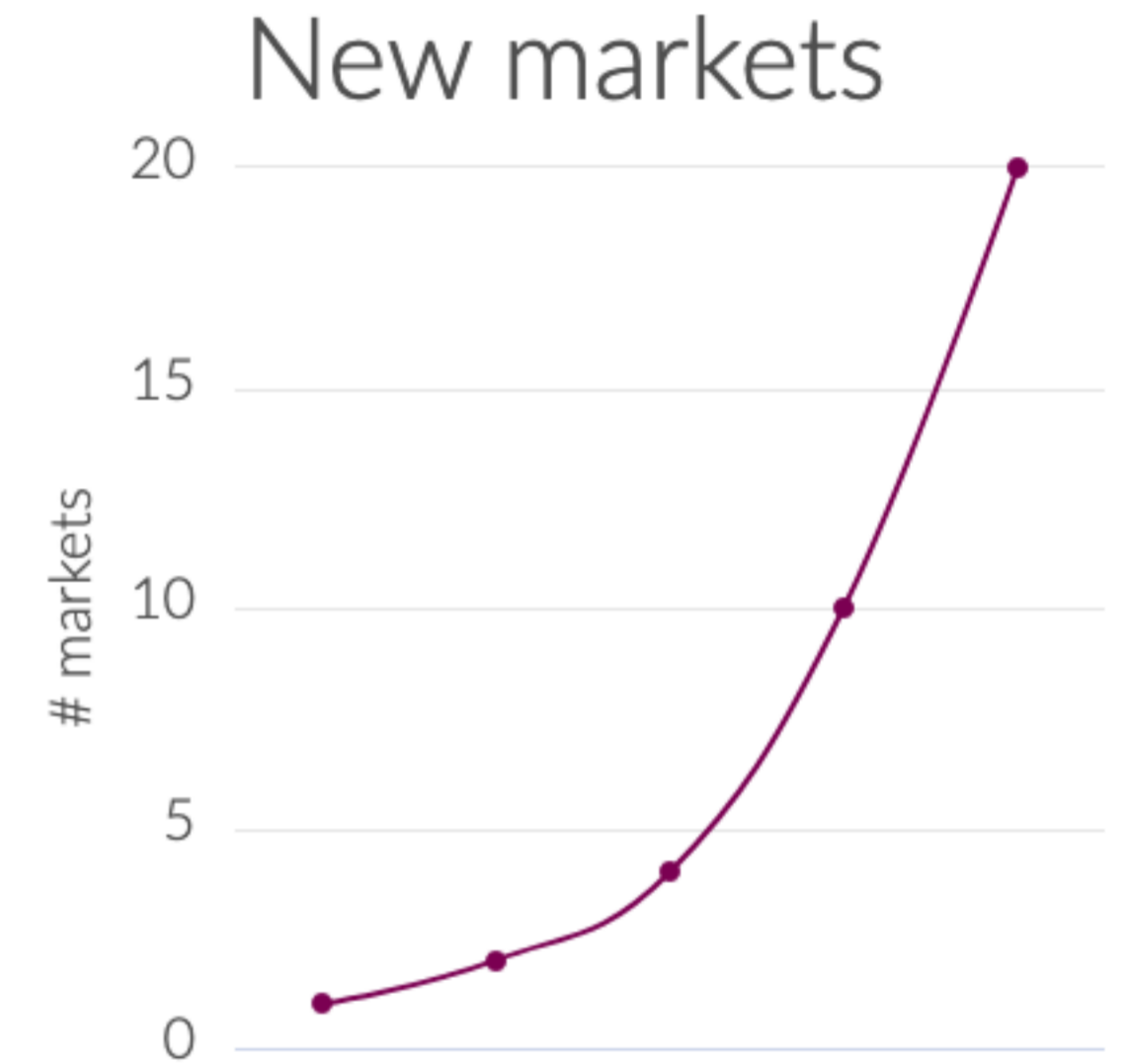
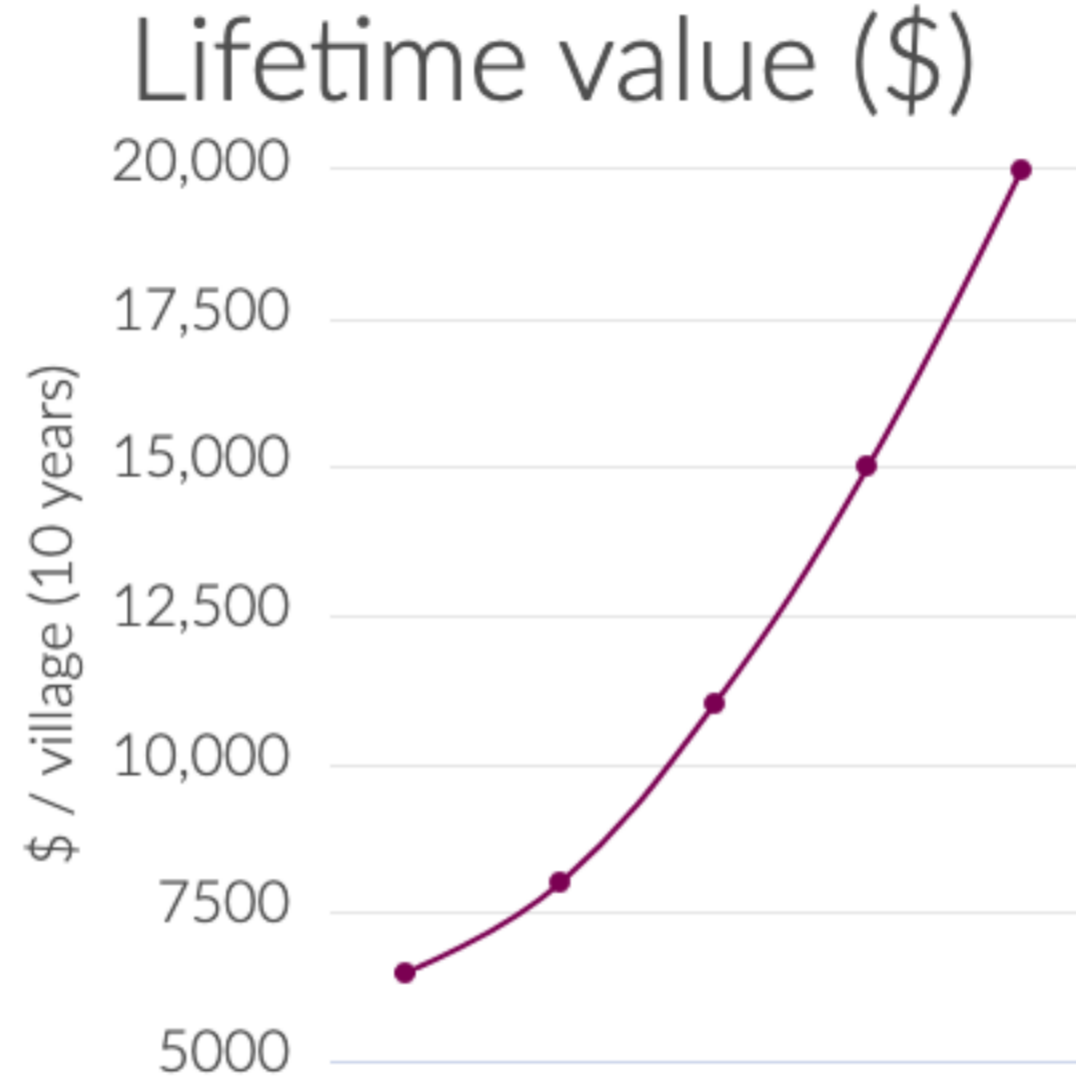
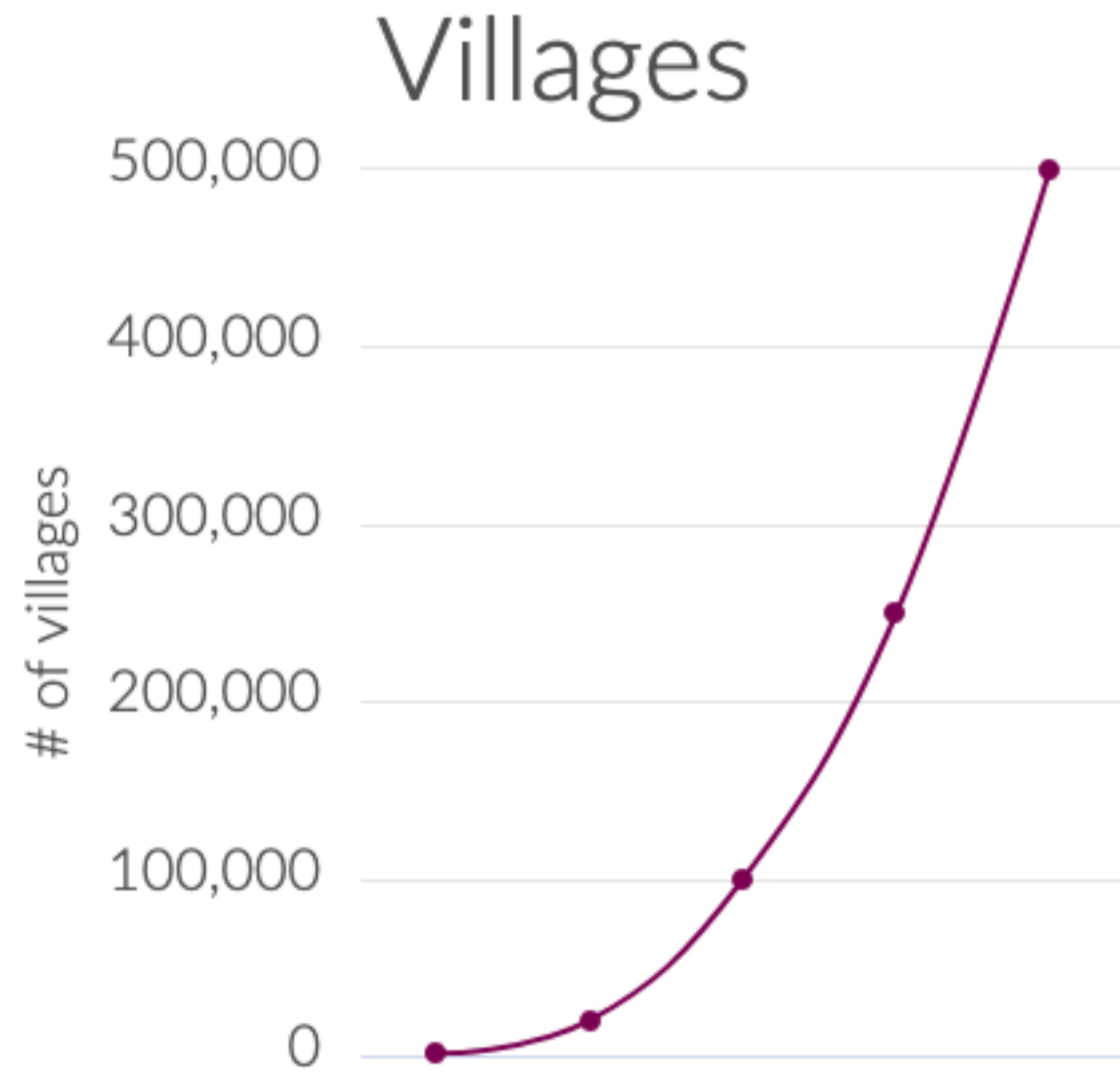
Initial analysis fee

Licence fee

New modules fee

+ Consulting fees

Our vision to scale VIDA



Actual 800 (on licence)

\$ 6,200 (10ys)

1 (mini-grids*)

Potential 500,000 (>3bn people)

\$ 20,000 (10ys)

Next: SHS, grid connected RE, healthcare,...

Go-to Market and Growth Drivers: VIDA is Becoming Industry Standard for Village Data



Freemium

We will make available a **free basic version** for specific countries and users to incentivise customers to experience VIDA and transition to the full version.



Network effect

As more users are on the VIDA platform, they have an incentive to **communicate between each other via the VIDA platform** (e.g. from government tenders to company users and from company users to their investors)



Customer "pull"

We grow within existing customers along the value chain (from analysis to monitoring), across new segments (from energy to agriculture) and into new geographies. (VIDA is highly scalable)



External growth drivers

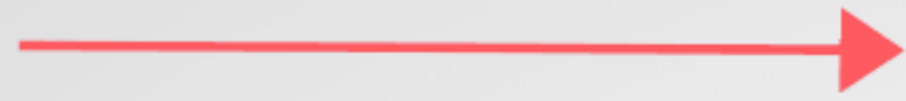
Stronger **push for SDGs** by governments and investors

COVID (in-person surveys replaced with remote analysis, boost in digital literacy of customers)

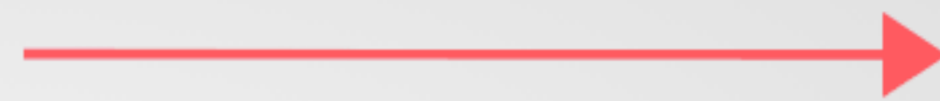
Cheaper, more capable input technology (earth observation and algorithms)

Competition (Data Gathering and Analysis in Rural Development)

Manual



Digital 1.0



Digital 2.0

On-ground surveys



Top-down (public data sets)



Bottom-up (private data-sets)



Top-down + bottom-up



"System of intelligence", fusing customer and third party data in a productivity software.

Funding: Fraym ca. \$8.5m (series A), AtlasAI ca. \$7m (series A), Premise ca. \$145m (series E)

The VIDA technology is tested, flexible and scalable



Unique algorithms

Deep learning algorithms to extract insights from a wide range of current and historic satellite data.



On-ground data integration

Automated upload functionalities for on-ground survey and IoT user data from thousands of villages



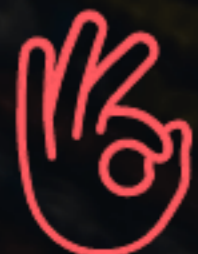
Fast delivery even in low-bandwidth regions

VIDA software is delivered rapidly and reliably in many low bandwidth countries on three continents.



Interoperability

Easy integration of third party software and data products to further improve user experience



tested by



Our social impact: we touch on almost all SDGs

We touch on **13 out of 17 SDGs**. We cannot achieve our goals without changing remote villages.

Example of electrification

Today, ca. 1 billion people still do not have access to modern energy. **Electrification efforts are currently far too slow** to achieve universal energy access by 2030 (SDG7). **With VIDA, that can change:** distributed electrification can be significantly scaled up and accelerated - offering development opportunities to hundreds of millions. We already channel **>\$1.5bn** into electrification in Africa.





Our climate impact

Adaptation: Distributed, renewable energy access in Africa can avoid **626 m/t CO2e by 2030** (1)

(1) Shell Foundation, 2021 ([link](#))

Mitigation: Energy access is a key element in making the most vulnerable populations - villagers in developing countries - **more resilient** to the effects of climate change by powering irrigation, cooling and food processing.

Our team



**Dr. Tobias
Engelmeier**

**Co-founder and
CEO**

Successful entrepreneur in data, energy and development (> 15 years experience)



Nabin Raj Ghaire
**Co-founder and
CCO**

Power engineer with experience in building software and mini-grids; from a Nepalese village



Philippe Raisin,
**Co-founder and
CTO**

Physicist with experience in entrepreneurship, software development and machine learning



**A highly global and
diverse team**

Our team of 12 software, AI and data engineers is from Africa, Europe and Asia, seamlessly collaborating from many different locations.

We are embedded in a strong support ecosystem

Our tech partnerships



→ AI support; ongoing **support contract**



→ EO support; **grant funding**



→ **Joint research and HR**

Accelerators and awards



Our path



Nov 2019

€1.5m seed funding from the European Space Agency



Feb 2021

The VIDA software went live!



Mar 2022

Planned close of Series A funding



Jul 2018

Feasibility study on product-market-fit



May 2020

First paid VIDA customer projects




Sept 2021

13 projects for 8 customers hosted on VIDA



Apr 2022

Planned launch of VIDA 2.0



We want to make VIDA the standard software for rural investment planning

To achieve that, we need an investment of **\$4m**

Tobias Engelmeier

tobias@villagedata.io

“ VIDA is a game changer

Ashish Shrestha, The World Bank