



```
region AS region,  
DISTINCT msiscn) AS subscriber_count
```

```
cells  
s.location_id = cells.cell_id  
.call_date >= '2020-02-01'  
ls.call_date <= CURRENT_DATE  
2
```

```
subscriber_count >= 15
```

```
unique_active_residents_per_region_per_day AS (  
s.call_date AS visit_date,  
region AS region,
```

7	2020-02-01
8	2020-02-01
9	2020-02-01
10	2020-02-01
11	2020-02-01
12	2020-02-01
13	2020-02-01
14	2020-02-01
15	2020-02-01
16	2020-02-01
17	2020-02-01
18	2020-02-01
19	2020-02-01
20	2020-02-01
21	2020-02-02
22	2020-02-02
23	2020-02-02

FLOWMINDER.ORG

Leveraging AI and big data analytics for good

Transforming novel big data into actionable insights for policy and operational decision-making



Challenge

In data-scarce settings, policy makers are flying blind, guessing when they should be knowing.



Limitations

On their own, current data collection, like census or surveys either take too long, lack representativity, or are too costly.



Opportunity

However, mobile operator data, which are passively and routinely generated, are available in all countries in a standard format at all mobile network operators.



Solution

We use such data to provide **timely, representative** and **cost-effective** data and insights for many applications.

Challenge

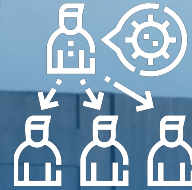
Every day, decisions that affect people's lives depend on understanding population mobility...



How many people have been displaced by a hurricane or conflict, and where they are now?



How successful has a digital transformation initiative been?



How does population mobility affect the spread of an infectious disease?



How many vaccines are needed for a community?

Challenge

... but understanding where people are is hard, particularly in low- and middle-income countries



Census and survey response rates are falling



Censuses are expensive, and take place only once a decade (or less!)



Key data providers such as IOM have had their budgets slashed



Conflict and inaccessibility make field data collection risky and costly

Opportunity

Mobile network operators passively generate data that can be used to infer insights on population, infrastructure, and a lot more....

Considerations

When working with this data source, there are several important considerations – all of which we address through well-tested, purpose-built solutions:



Bias



Spatial & temporal resolution



Ownership & data governance

Solution

Using big data & AI innovation, we transform mobile operator data into actionable insights for policy and operational decision-making.

We are the global leaders in mobile operator analytics for good. We improve decision-makers' understanding of population mobility, migration & distribution both in everyday situations, and in times of crisis.



The formula that makes us unique

Global leaders

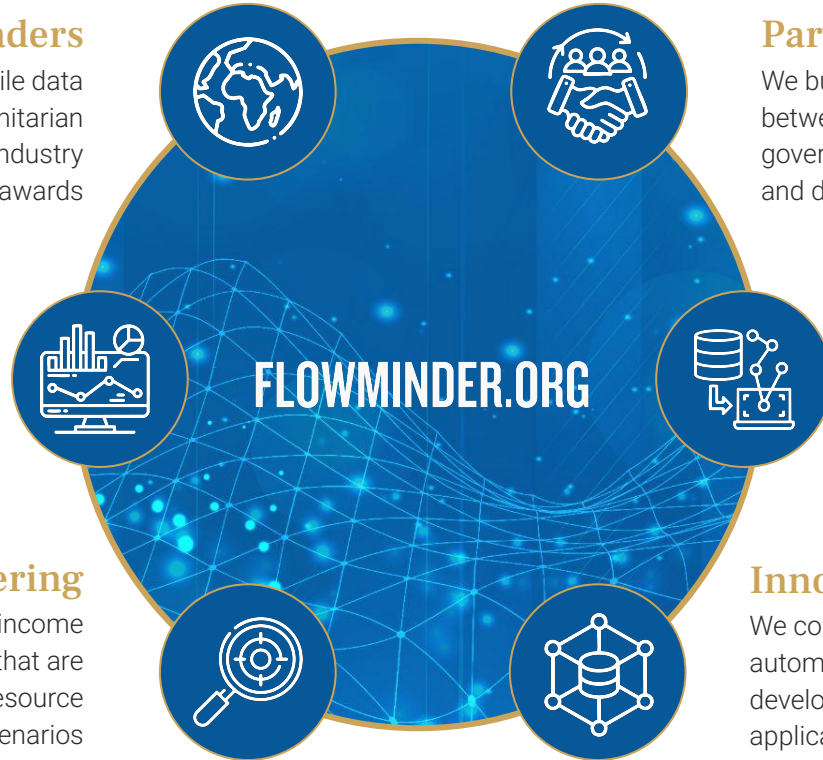
Global leaders in the use of mobile data for development and humanitarian purposes, recognised via top industry and science awards

Ethical expertise

We leverage over 15 years of experience in big data analytics to continuously evolve and create robust privacy, ethics, and governance solutions.

Adaptive engineering

We focus on low- and middle-income country settings to build solutions that are designed specifically for resource constrained scenarios



Partnerships

We build powerful partnerships between mobile network operators, governments and and humanitarian and development organisations

Data science & AI

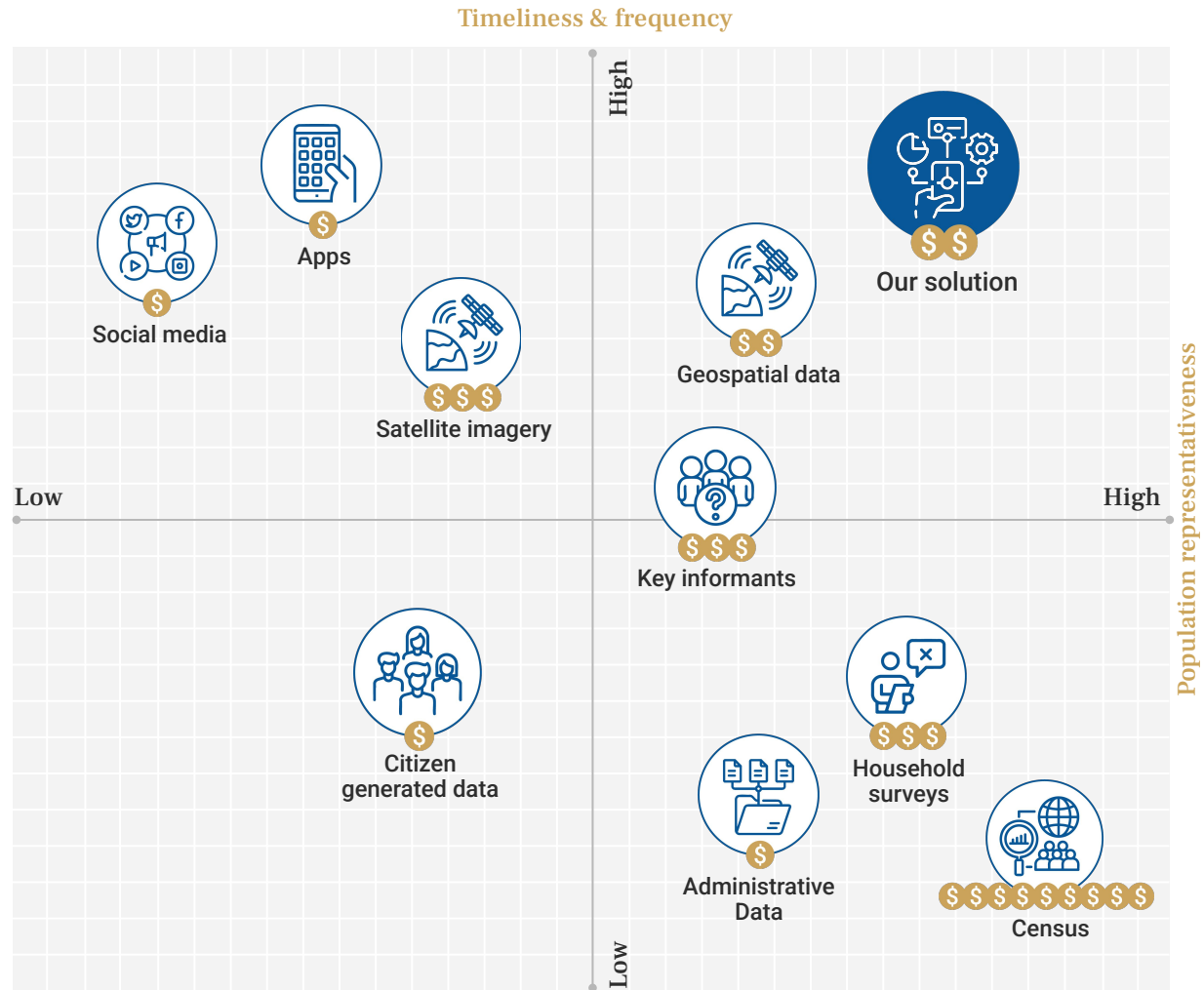
We develop and run our own AI models that extract most value from public and privately-held datasets

Innovation

We constantly innovate; from developing automated, privacy preserving software; developing new methods for a range of applications; through to partnership models that open up the data for impact.

Our solution is the right balance between

- Timeliness
- Representativeness
- Cost-effectiveness



What our partners think of us



“This [collaboration] is certainly a proof that telecommunications such as ours can leverage the strengths of their core business to do good in a more consistent and sustainable way. We pledge our commitment to ensure that data is mined for the good of every Ghanaian.”

Patricia Obo-Nai
Chief Executive Officer (CEO) of Telecel Ghana



“The information we received today allow us to see whether the decisions that have been taken at the medical level have, firstly, been effective and, secondly, whether they have economic and social consequences, because the role of the Task Force is to assess the COVID-19 response in itself but also the socio-economic consequences in order to make a precise report to the Head of State.”

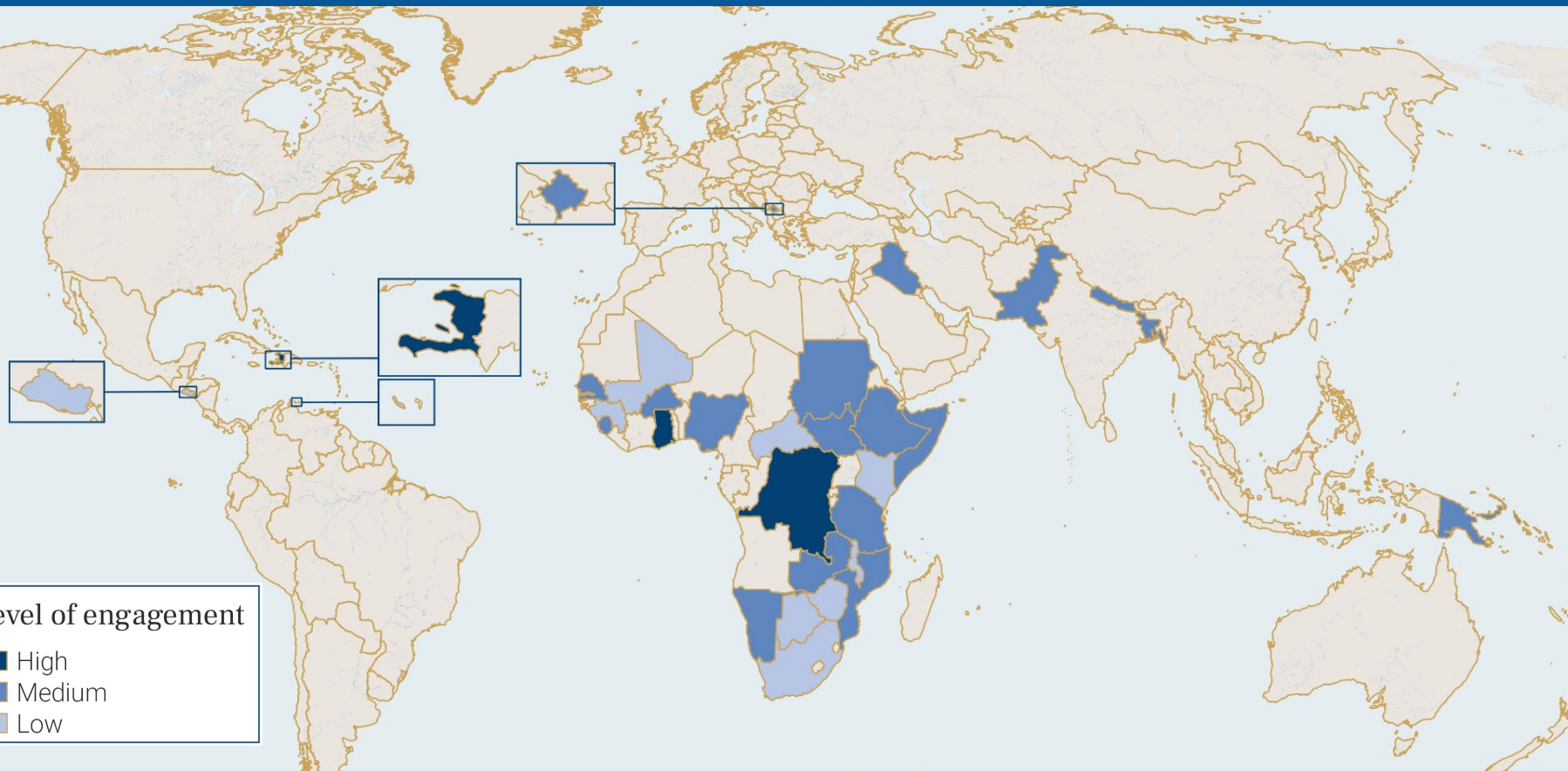
Dr. Kamba
Coordinator of the Presidential Task Force, DRC



"Flowminder's data made it clear that Port-au-Prince was emptying, which no other dataset had shown before. It confirmed our hypothesis about the population decline and, crucially, provided the numbers to support it."

Jean-Martin Bauer
Director of Food Security and Nutrition Analysis,
World Food Programme (WFP)

Our geographical reach



We are seeking investment to scale our work through the following initiatives



Expanding the impact of mobile data to more countries

Developing new partnerships and opening up data to provide the same opportunities and impact to new countries.



Deploying AI and new technologies

Investing in R&D and leveraging the latest technologies to be better, faster and cheaper.



Expanding to new applications & sectors

Unlocking the full potential of the data by serving multiple use cases.

Partners, funders and collaborators



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