

AI for the Most Vulnerable

Vedran Sekara
@vedransekara



UNICEF Innovation





epidemics

a changing world



epidemics



displacement

a changing world



epidemics



displacement



climate change

a changing world



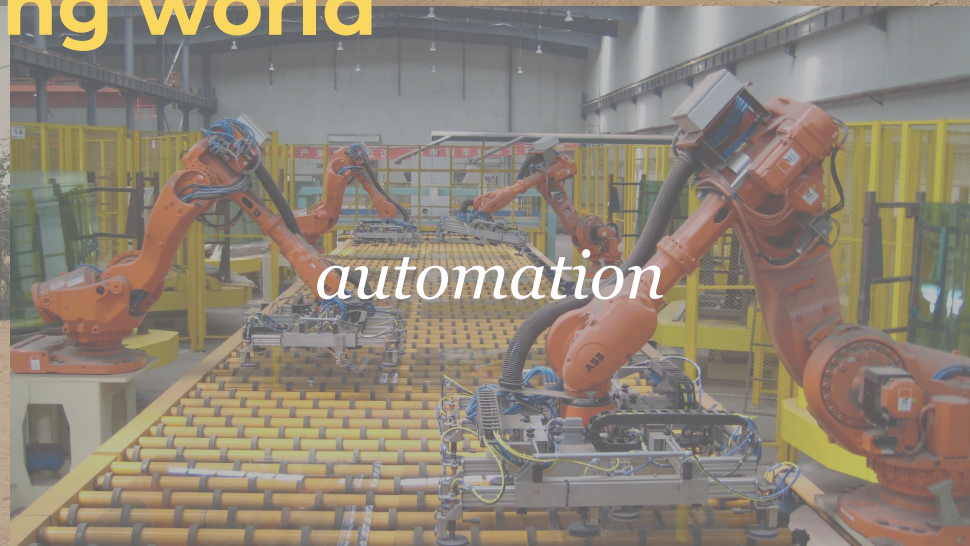
epidemics



displacement



climate change



automation

a changing world

MAGIC BOX



big data platform

MAGIC BOX



big data platform

*hum. / dev.
sectors*



important problems

little data

*private
sector*



not-so important problems

lots of data

MAGIC BOX



big data platform

*hum. / dev.
sectors*



important problems

little data

*private
sector*



MAGIC BOX



*hum. / dev.
sectors*



not-so important problems

lots of data



big data platform



important problems

little data

larger ecosystem



academia



governments



*international
organizations*

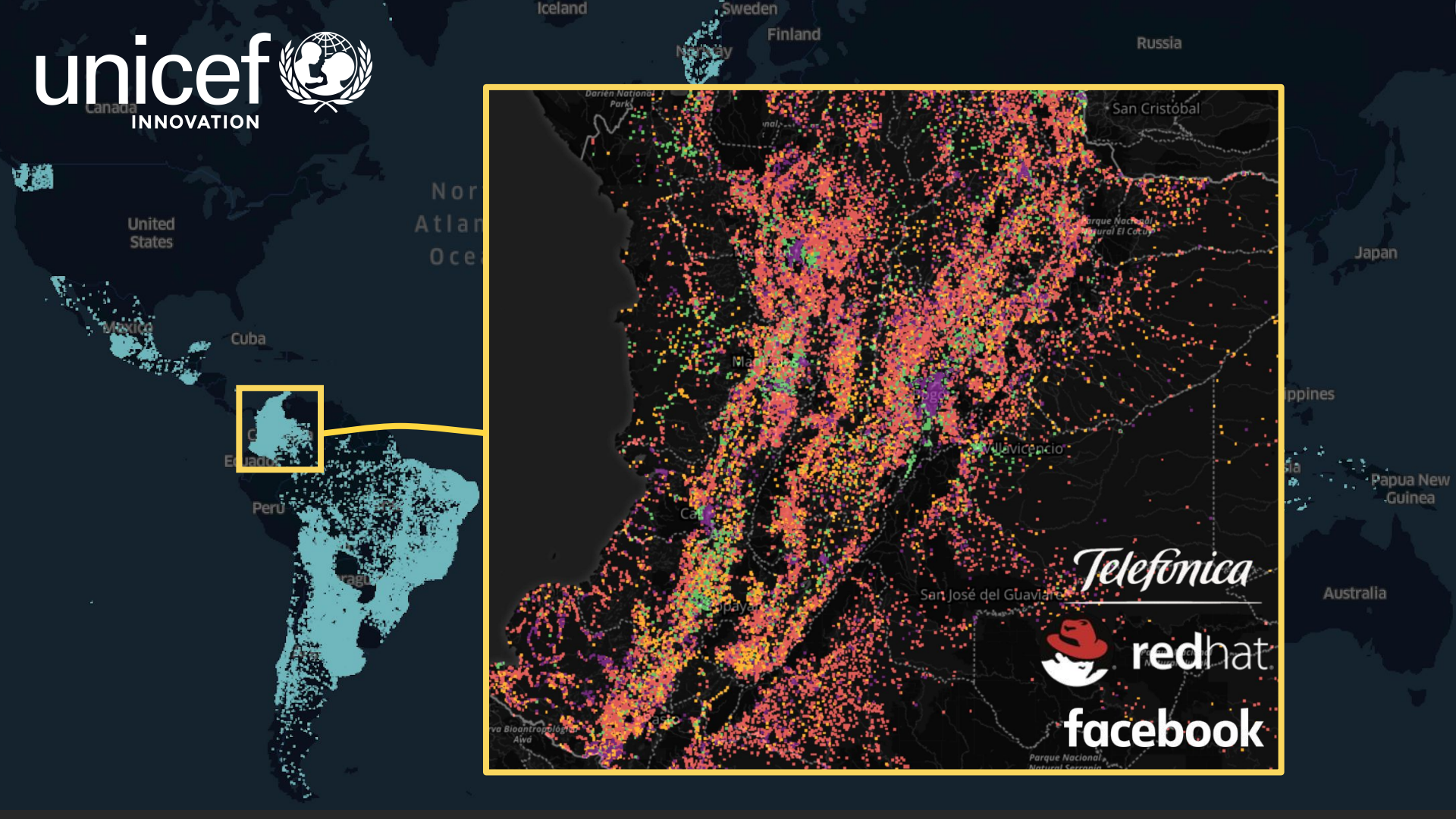
venture fund



\$100k equity free investment

two examples

Can we map every school in the world?

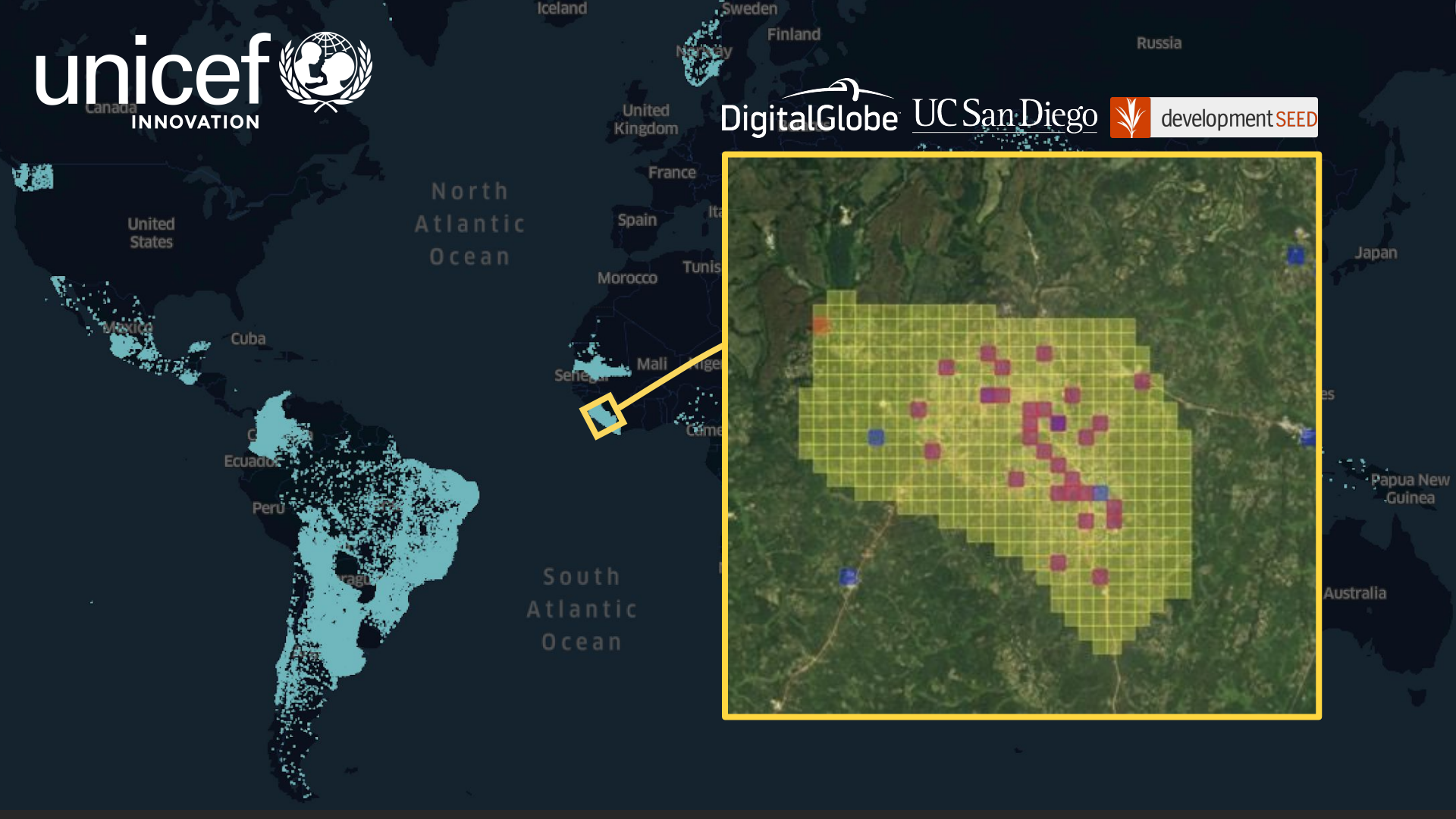


Telefónica



redhat

facebook





current approach

[illegible]

current approach 2

	-999 →NEXT PERSON	-999 →NEXT PERSON	-999 →NEXT PERSON	-999 →NEXT PERSON	-999 →NEXT PERSON	-999 →NEXT PERSON
1.9	1 →1.10 2 →NEXT PERSON	1 →1.10 2 →NEXT PERSON	1 →1.10 2 →NEXT PERSON	1 →1.10 2 →NEXT PERSON	1 →1.10 2 →NEXT PERSON	1 →1.10 2 →NEXT PERSON
1.10	ID <input type="text"/>	ID <input type="text"/>	ID <input type="text"/>	ID <input type="text"/>	ID <input type="text"/>	ID <input type="text"/>

07	08	09	10	11	12	
.....	.....	.....	.....	.....	.....	1.0
1	1	1	1	1	1	1.1
2	2	2	2	2	2	1.2
YEAR <input type="text"/>	YEAR <input type="text"/>	YEAR <input type="text"/>	YEAR <input type="text"/>	YEAR <input type="text"/>	YEAR <input type="text"/>	1.2
MONTH <input type="text"/>	MONTH <input type="text"/>	MONTH <input type="text"/>	MONTH <input type="text"/>	MONTH <input type="text"/>	MONTH <input type="text"/>	
-888	-888	-888	-888	-888	-888	
-999	-999	-999	-999	-999	-999	
1 →1.4 2 →NEXT PERSON	1 →1.4 2 →NEXT PERSON	1 →1.4 2 →NEXT PERSON	1 →1.4 2 →NEXT PERSON	1 →1.4 2 →NEXT PERSON	1 →1.4 2 →NEXT PERSON	1.3
YEAR <input type="text"/>	YEAR <input type="text"/>	YEAR <input type="text"/>	YEAR <input type="text"/>	YEAR <input type="text"/>	YEAR <input type="text"/>	1.4
MONTH <input type="text"/>	MONTH <input type="text"/>	MONTH <input type="text"/>	MONTH <input type="text"/>	MONTH <input type="text"/>	MONTH <input type="text"/>	
-888	-888	-888	-888	-888	-888	
-999	-999	-999	-999	-999	-999	
CODE <input type="text"/>	CODE <input type="text"/>	CODE <input type="text"/>	CODE <input type="text"/>	CODE <input type="text"/>	CODE <input type="text"/>	1.5
1 →1.7 2 →1.8 3 →1.7 4 →1.7	1 →1.7 2 →1.8 3 →1.7 4 →1.7	1 →1.7 2 →1.8 3 →1.7 4 →1.7	1 →1.7 2 →1.8 3 →1.7 4 →1.7	1 →1.7 2 →1.8 3 →1.7 4 →1.7	1 →1.7 2 →1.8 3 →1.7 4 →1.7	1.6
..... →1.9 -888 →NEXT PERSON -999 →NEXT PERSON	..... →1.9 -888 →NEXT PERSON -999 →NEXT PERSON	..... →1.9 -888 →NEXT PERSON -999 →NEXT PERSON	..... →1.9 -888 →NEXT PERSON -999 →NEXT PERSON	..... →1.9 -888 →NEXT PERSON -999 →NEXT PERSON	..... →1.9 -888 →NEXT PERSON -999 →NEXT PERSON	1.7
						1.8

current approach ...

	SCRUTINY		
5.0	Was this questionnaire scrutinized?	YES.....1 NO.....2	
5.1	DATE OF SCRUTINY	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5.2	SCRUTINIZED BY (MUST be different than Investigator code)	<input type="text"/> <input type="text"/>	
	BACK TO FIELD		
6.0	Was this questionnaire sent back to field because of scrutiny or re-coding?	YES.....1 NO.....2	
6.1	DATE OF SEND-BACK	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
6.2	INTERVIEWER CODE	<input type="text"/> <input type="text"/>	

current approach ...



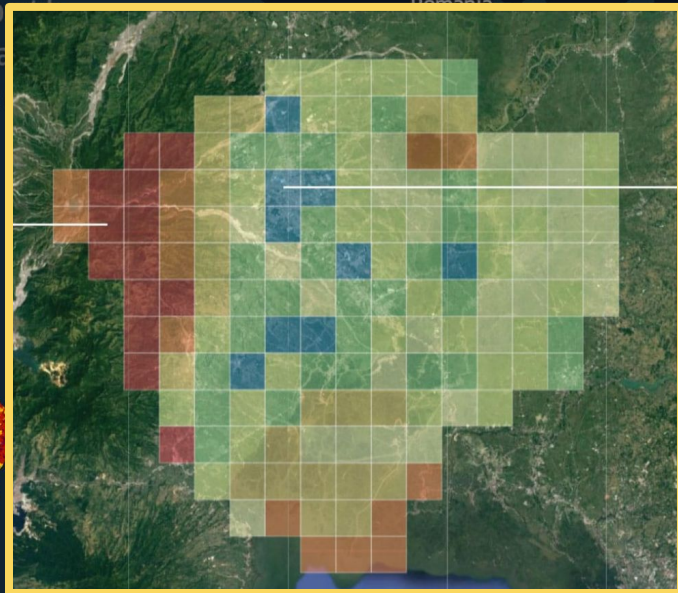
	SCRUTINY		
5.0	Was this questionnaire scrutinized?	YES.....1 NO.....2	
5.1	DATE OF SCRUTINY	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
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6.2	INTERVIEWER CODE	<input type="text"/> <input type="text"/>	



Can we do this in
a smarter way?



can we use social media?



can we combine
datasources?

additional stuff we work on



migrations



crop mapping



population estimation



information poverty



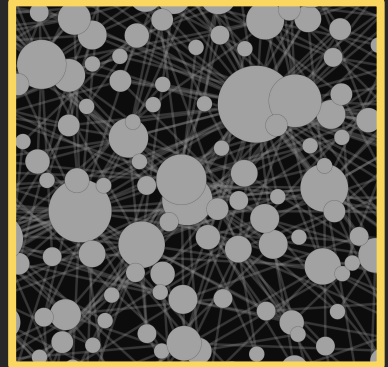
epidemics



informal settlements



natural disasters



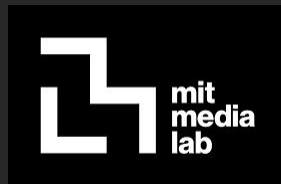
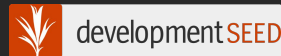
algorithmic bias



R·I·T



UNIVERSITY OF
OXFORD



we partner with a
lot of people



Thinking
Machines
Data Science

Google *Telefonica*

amadeus DigitalGlobe

IBM



BAYES IMPACT

facebook



redhat.

Bloomberg

but are in need of
more friends



www.unicef.org/innovation/Magicbox
www.unicef.org/innovation/venturefund