

# Regional Workshop on Emerging Technologies to Respond to Climate Change

*Supporting **private sector** in adopting emerging technologies*

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Virtual

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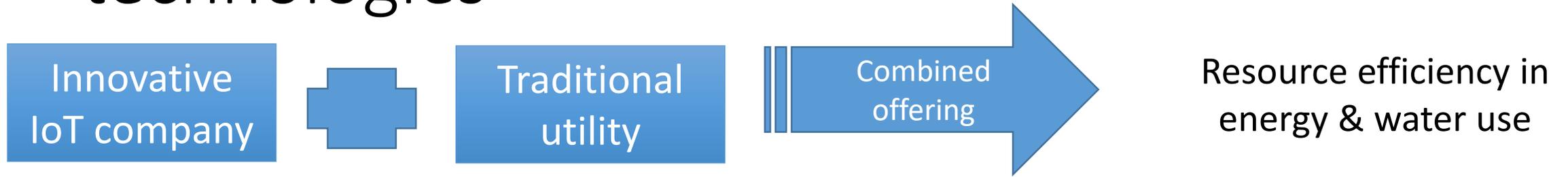


# The Key Messages

1. Rapid adoption of climate change innovations require **partnerships**
2. Partnerships are **not easy** to forge and foster
3. Donors should **provide incentives** to promote partnerships
4. Emerging technologies **will not be sufficient** in meeting 2030 goals



# Partnerships are critical: the case of IoT technologies



## *Example:*

Wonderkid Multimedia a Kenyan company that provides utility data solutions

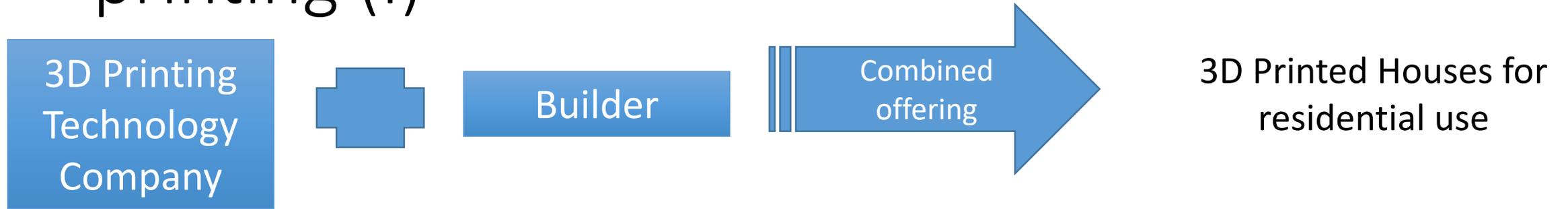
Traditional utilities are implementing smart meters to reduce “lost electricity/water”

Wonderkid provides African utilities comprehensive integrated solutions to collect and act on data

The solution was developed for more than a year in **close partnership** with Nairobi Water before it has found its home in other utilities. Nairobi Water and Wonderkid worked closely to co-develop the solution and win acceptance within the organization.



# Partnerships are critical: the case of 3D printing (I)



*Example:*

Mighty Buildings “prints” building parts

Palari Homes is a specialized builder

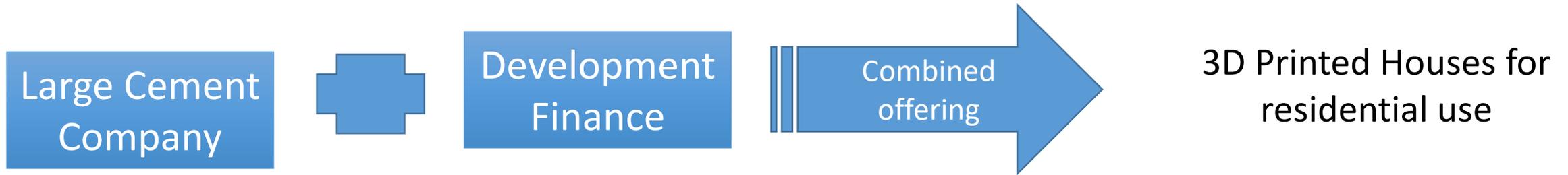
Together they are building a batch of 3D printed houses in California

The construction industry is responsible for 11% of the world’s man-made carbon-dioxide emissions while about 20% of the world population lacks adequate accommodation

Automating through 3D printing means cost reduction and environmental benefits because pre-fabrication reduces transportation journeys

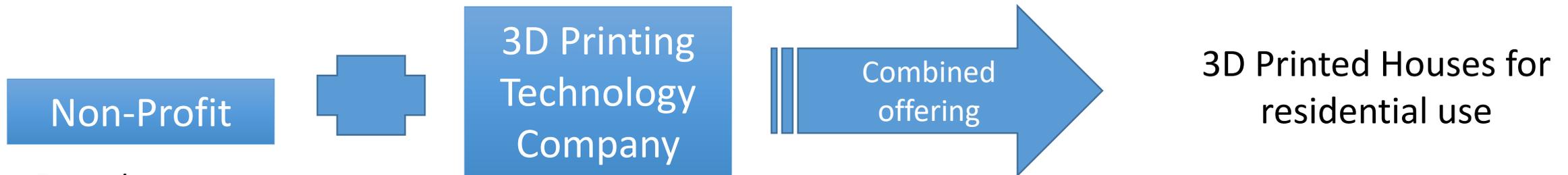


# Partnerships are critical: the case of 3D printing (II & III)



*Example:*

Holcim – the world’s largest cement maker – and CDC group – the UK based development finance are “printing” 3D houses in Malawi in 12 hours at USD 10,000

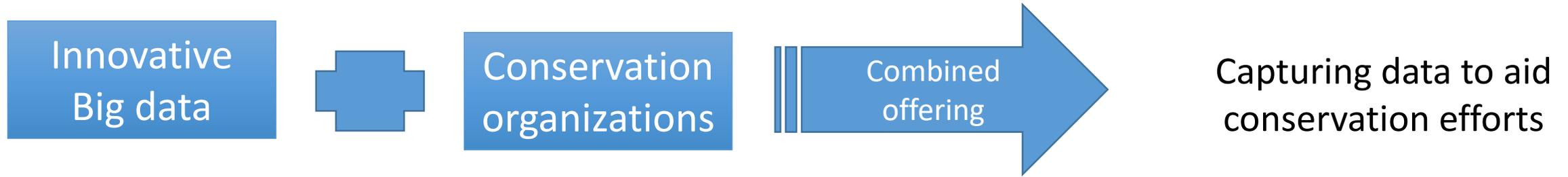


*Example:*

New Story – a charity for the homeless – and ICON– a technology firm - are “printing” 3D houses in Mexico



# Partnerships are critical: the case of Big Data



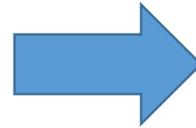
## Examples:

1. AudioMoth from Open Acoustic Devices sells devices at USD 60 to identify noises. The founder of the company is from Oxford University.
2. Trail Guard.AI ,developed by Resolve a conservation organization in partnership with Intel is a camera device to locate poachers.
3. Wildlife Insights, is a collaboration of seven large conservation organizations with support from Google is capturing camera images and identifying species
4. Apps such as iNaturalist and eBird have helped in galvanizing millions of citizen ecologists to partner with scientists



# Building Partnerships require support

- Wonderkid Multimedia was born in a World Bank Water hackathon in 2011
- The Nairobi Water management actively supported the change management process
- The GSMA Mobile for Development grant allowed the scale up to 4 other utilities



Utilities have to embrace Open Innovation by way of being open to embracing technology innovations from the start up world

Initiatives and support from outside can help in the process

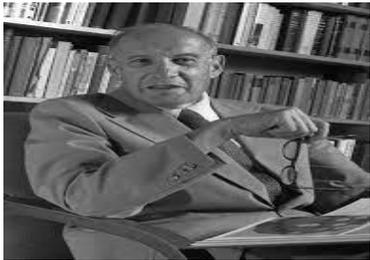


# 4 main ways of fostering partnerships

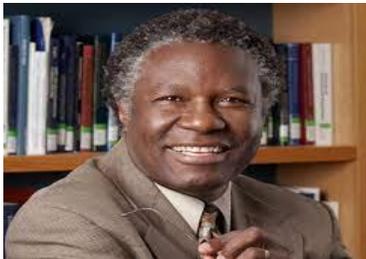
- “Solutioning” : collaborative solution making to solve identified specific problems (hackathons is an example)
- “Challenge fund”: they seek proposals for funding in specific areas and prioritize partnerships (GSMA Mobile for is an example)
- “Accelerators”: they accelerate companies in specific areas (such as food or AI)
- “Results based financing”: using donor grants to support deployment of products/achievement of outcomes (has been extensively used in energy)

# Emerging Technologies alone cannot help

We know this from the history of innovation



From Peter Drucker and Geoffrey Moore, we know that innovation starts from “niches”



From Calestous Juma, we know that innovation has its very strong enemies



From Jaideep Prabhu we know that large scale policy needs to start with experiments



# “Collaborative Enterprise”

For private sector to adopt emerging technologies for climate change within a decade:

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