

AI-mediated smart crowdsourcing during COVID-19: Extra-institutional risk communication in Beijing

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Agenda



Introduction

Crowdsourcing and smart crowdsourcing



The Study

Beijing's multi-sector e-health campaign

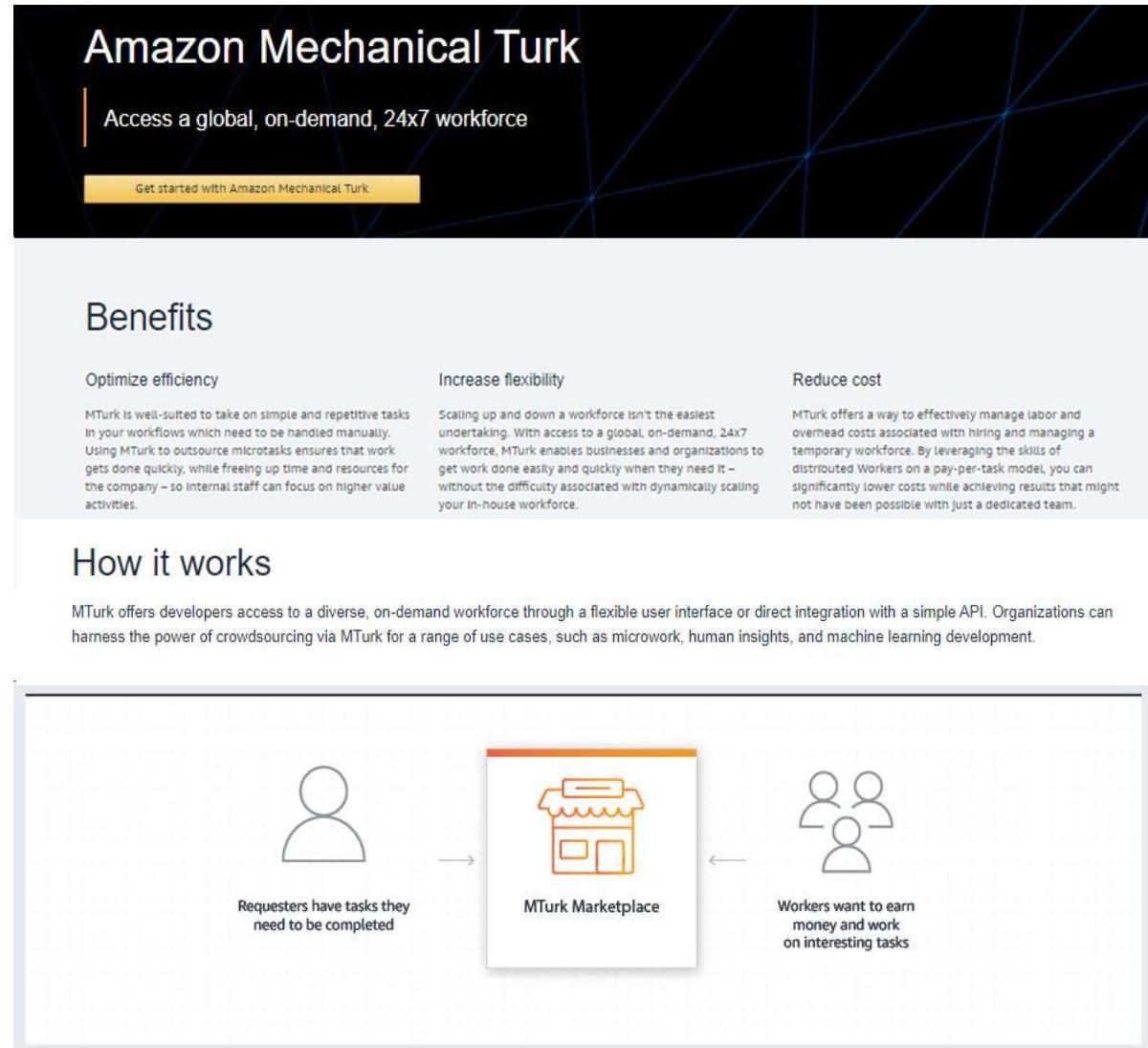


Discussion

Smart crowdsourcing, extra-institutional
risk communication, and social justice

What is crowdsourcing?

Crowdsourcing platforms enable job requesters to post Human Intelligence Tasks (HITs) – surveys, manual tagging, etc.



The image shows the Amazon Mechanical Turk homepage and a flow diagram of the platform's operation.

Amazon Mechanical Turk

Access a global, on-demand, 24x7 workforce

Get started with Amazon Mechanical Turk

Benefits

- Optimize efficiency**
MTurk is well-suited to take on simple and repetitive tasks in your workflows which need to be handled manually. Using MTurk to outsource microtasks ensures that work gets done quickly, while freeing up time and resources for the company – so internal staff can focus on higher value activities.
- Increase flexibility**
Scaling up and down a workforce isn't the easiest undertaking. With access to a global, on-demand, 24x7 workforce, MTurk enables businesses and organizations to get work done easily and quickly when they need it – without the difficulty associated with dynamically scaling your in-house workforce.
- Reduce cost**
MTurk offers a way to effectively manage labor and overhead costs associated with hiring and managing a temporary workforce. By leveraging the skills of distributed Workers on a pay-per-task model, you can significantly lower costs while achieving results that might not have been possible with just a dedicated team.

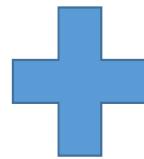
How it works

MTurk offers developers access to a diverse, on-demand workforce through a flexible user interface or direct integration with a simple API. Organizations can harness the power of crowdsourcing via MTurk for a range of use cases, such as microwork, human insights, and machine learning development.

Requesters have tasks they need to be completed → MTurk Marketplace ← Workers want to earn money and work on interesting tasks

Why crowdsourcing in pandemic management?

Participatory,
meritocratic, &
bottom-up processes



Incentive
mechanisms

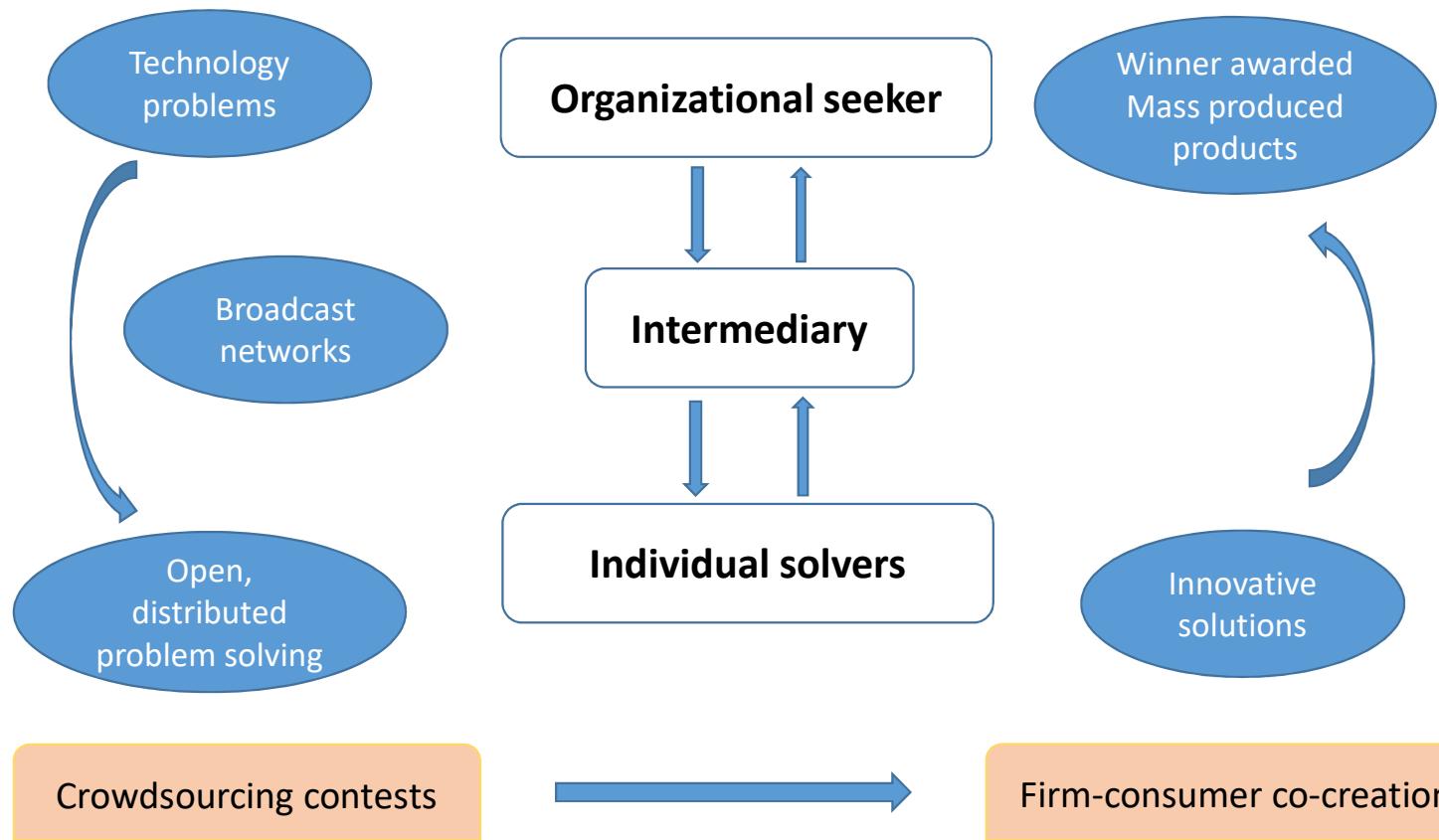
Top-down
management
needs



Local, regional,
or global
**networked
prosumption**

Brabham, 2013; Guth & Brabham, 2017

Players and processes of crowdsourcing

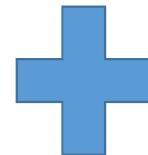


kaggle
Data science & ML

Schafer, Antons, Luttgens, Piller, & Salge, 2017; Ding, 2020

What is smart crowdsourcing?

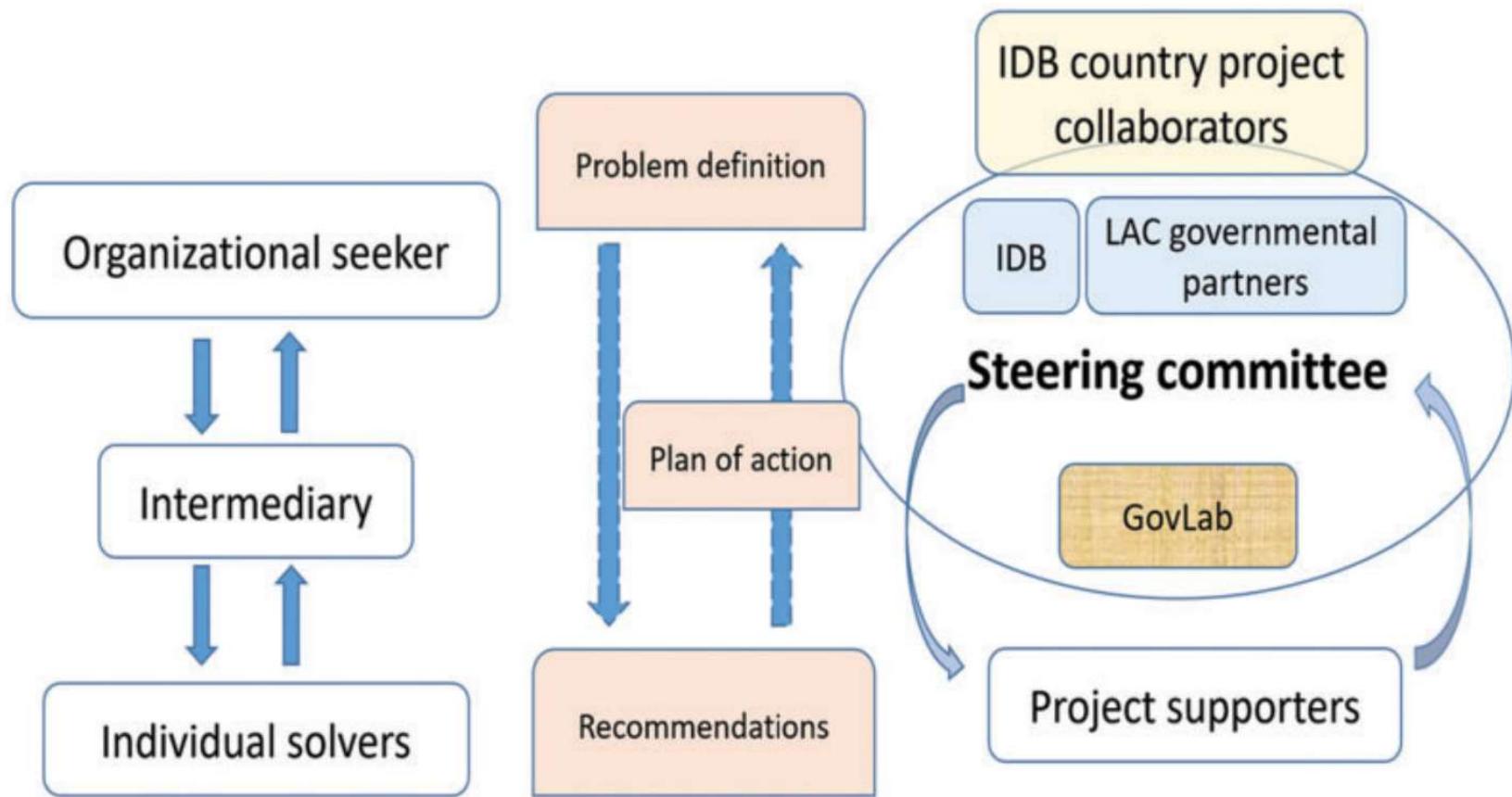
Crowdsourcing
- expert with know-how



Curation



Outcomes
- Implementable



Ding (2020). Crowdsourcing, Social Media, and Intercultural Communication About Zika

Beijing's multi-sector e-health campaign



> 4600 volunteers – Feb 5
> 14,000 responses - April 13

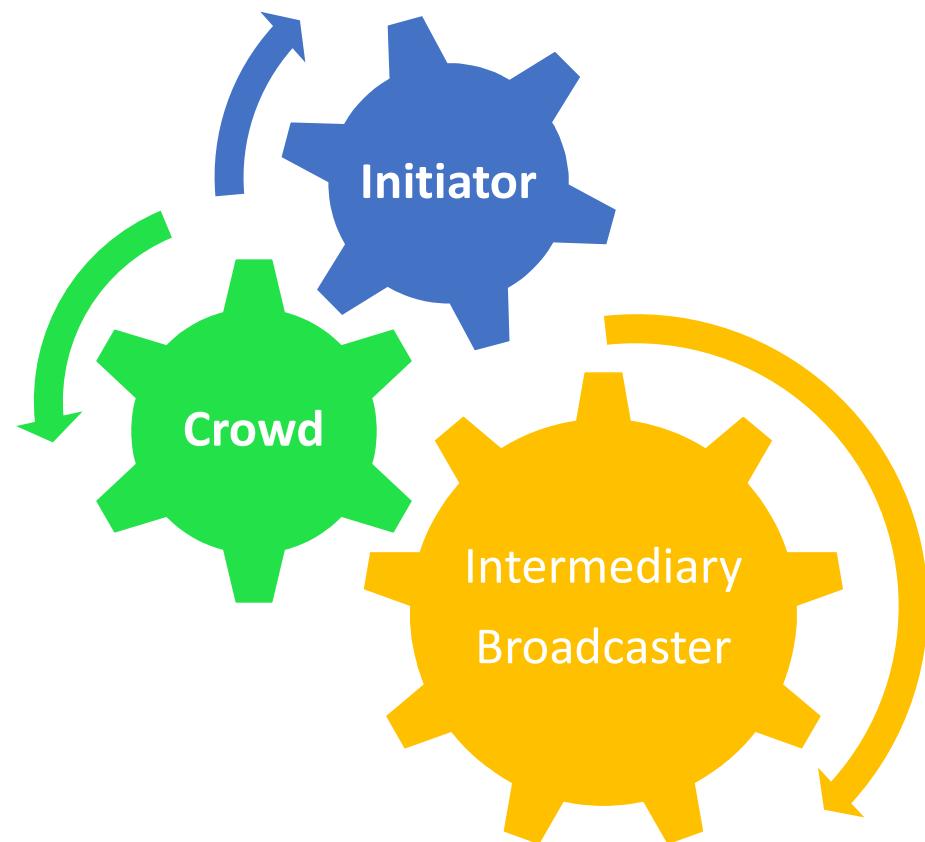
Beijing e-health
January 26 initiated,
February 1 released with
1000 volunteers

Wuhan lockdown
January 23-April 8, 2020

Key Player 1
Professional
Organization

Key Player 2:
Intelligent
Crowd - Experts

Key Player 3:
Technology
Service Provider





Aggregate authoritative content in one portal



Beijing Medical
Association (BMA)

Defining
problems

Seekers

Seeking
solvers

Solvers

Providing medical
insights

Intermediaries

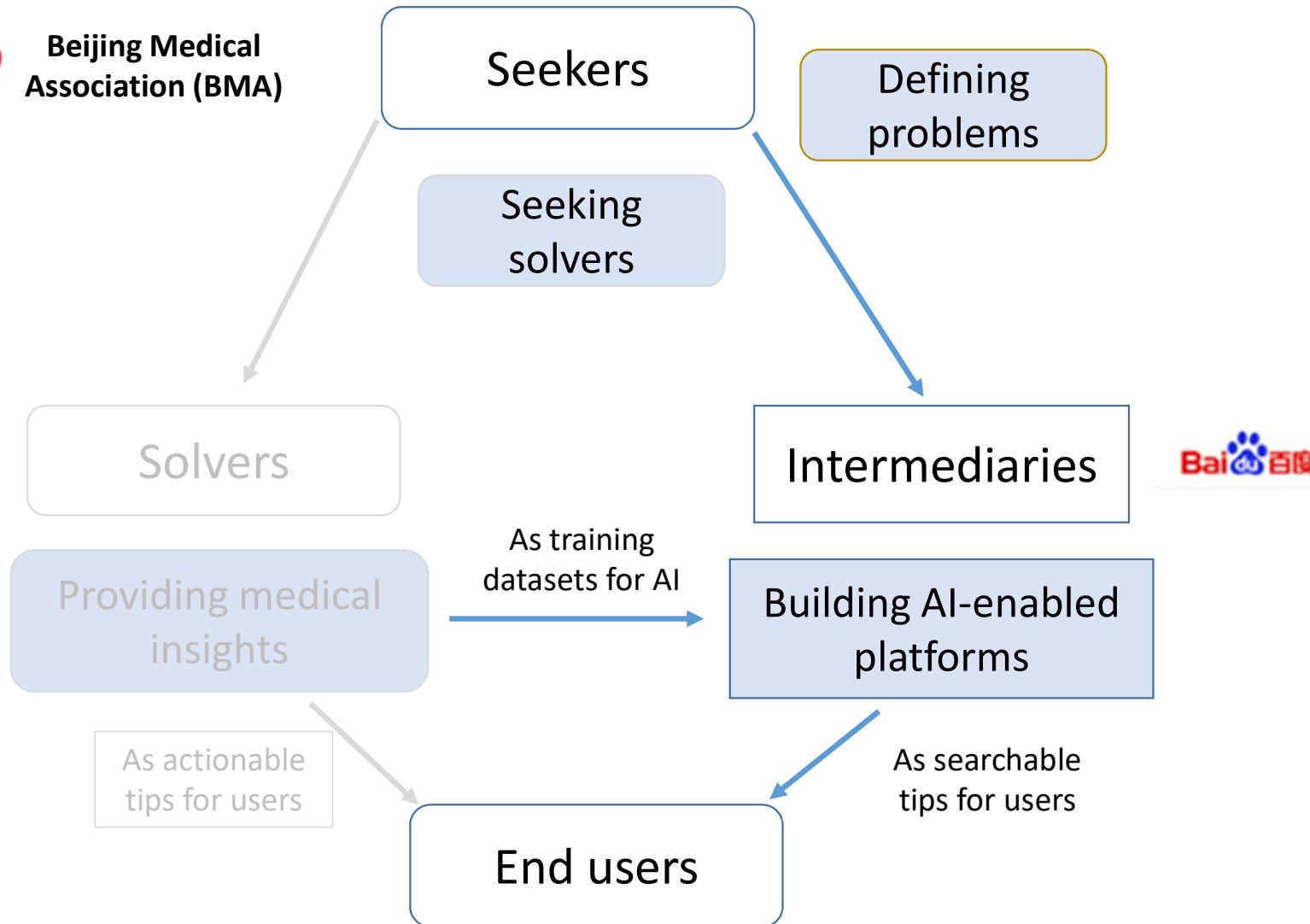
Reduced
hospital visits

As actionable
tips for users

Distributed knowledge work



Beijing Medical Association (BMA)





Beijing Medical Association (BMA)

Seekers

Defining problems

Seeking solvers

BJOMCPC platform

MCWs as Solvers

Providing medical insights

**Techno-
Intermediaries**



Texts

As training
datasets for AI

Videos

Live
sessions

Building AI-enabled
platforms

Telemedicine

As actionable
tips for users

As searchable
tips for users

End users



JD Health



Hinacom

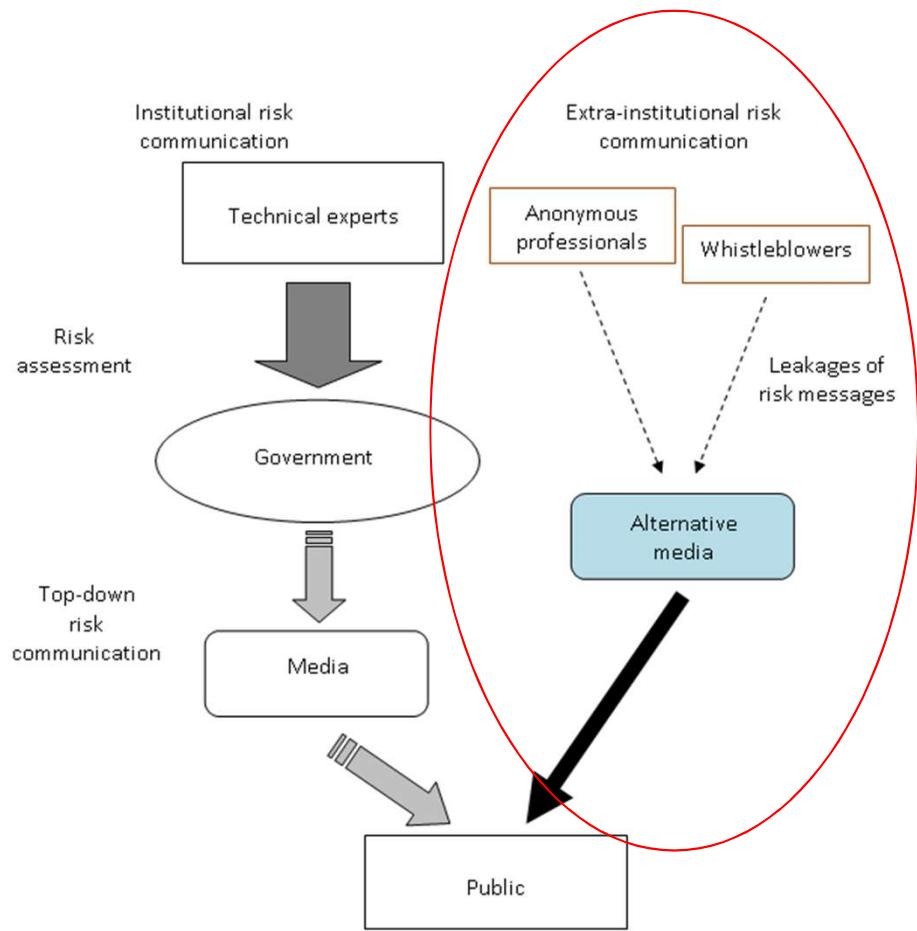


Amediway

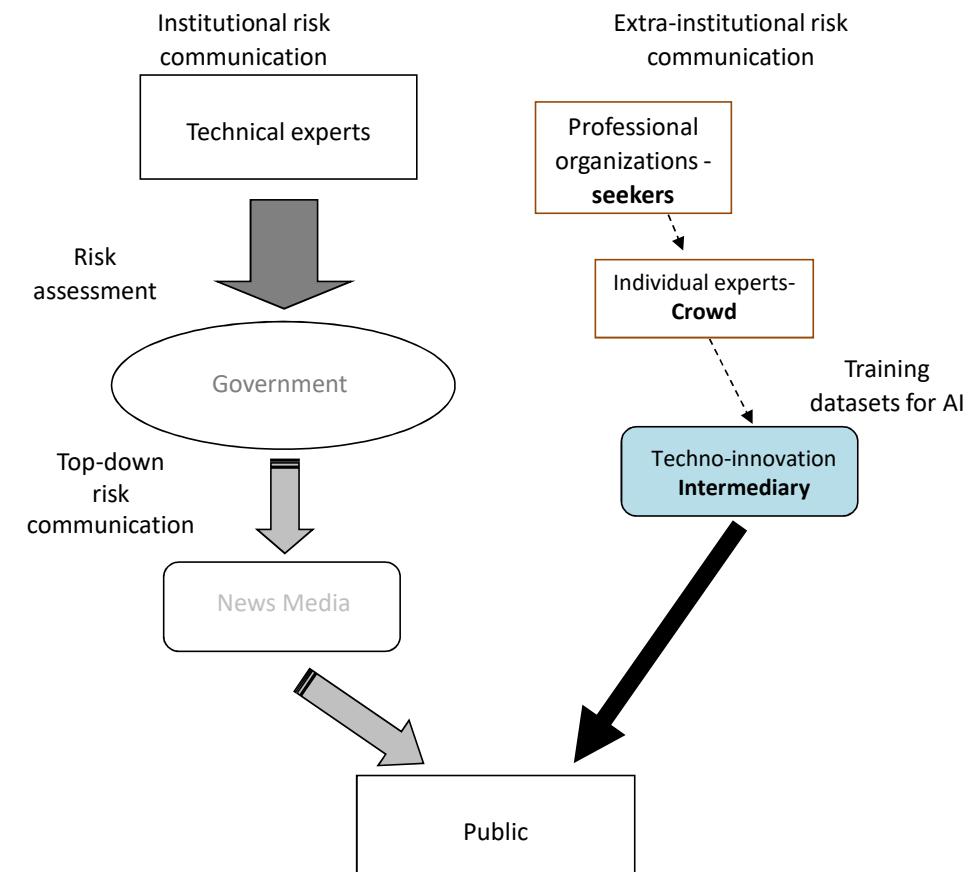


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Smart crowdsourcing and risk communication

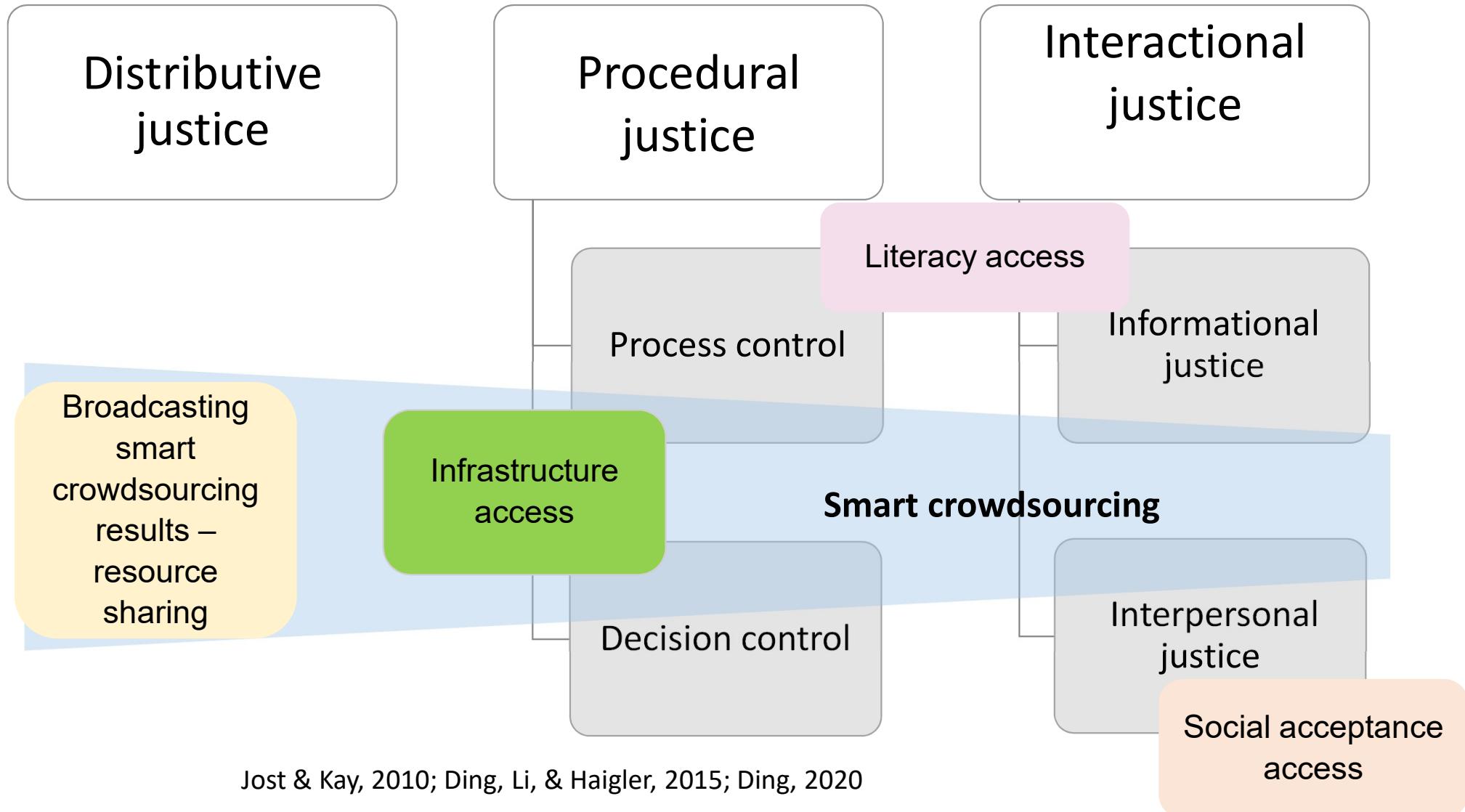


Ding (2014). SARS risk communication

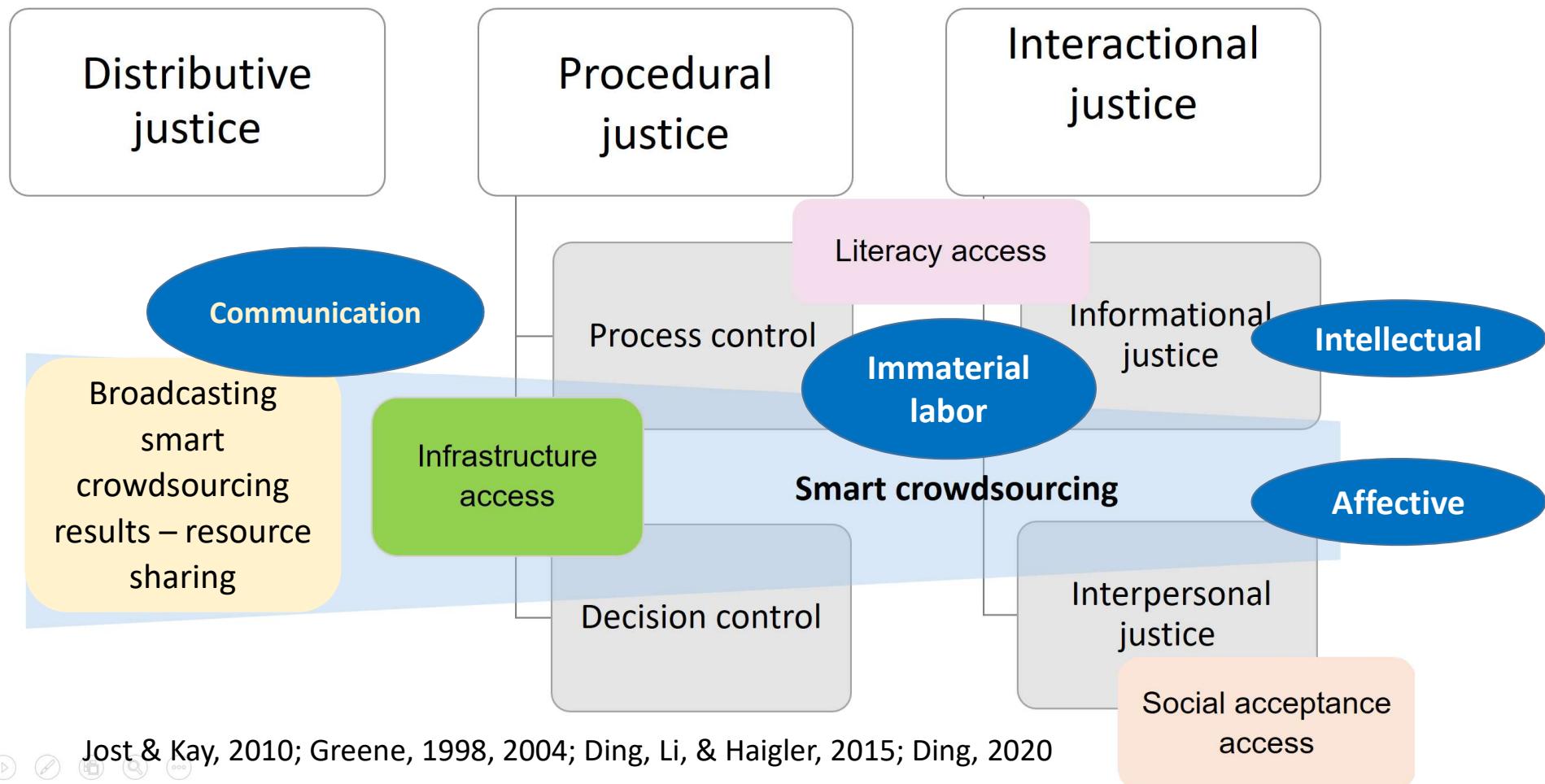


Ding (2021). COVID-19 risk communication

Smart crowdsourcing and social justice



Augment distributed knowledge work/immaterial labor



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