Narratives of Change
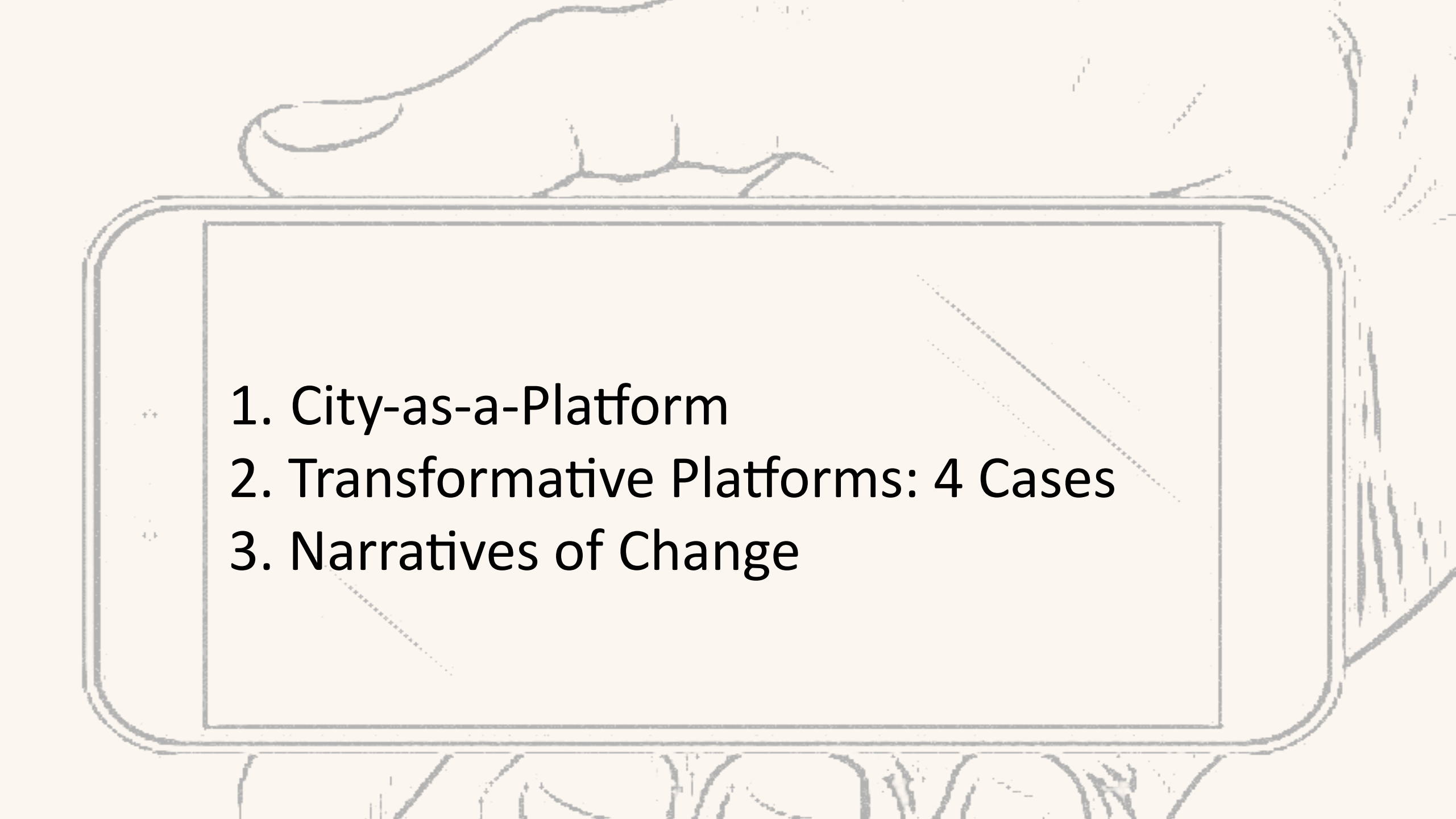
Ian Banerjee

Transformative power of social and digital networks
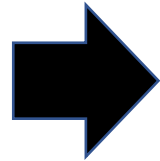
Leaving no one behind
EZA Tagung, Rathaus
21. Oktober 2022

1. City-as-a-Platform
2. Transformative Platforms: 4 Cases
3. Narratives of Change

Key question

How to deploy digital platforms for inclusive development?

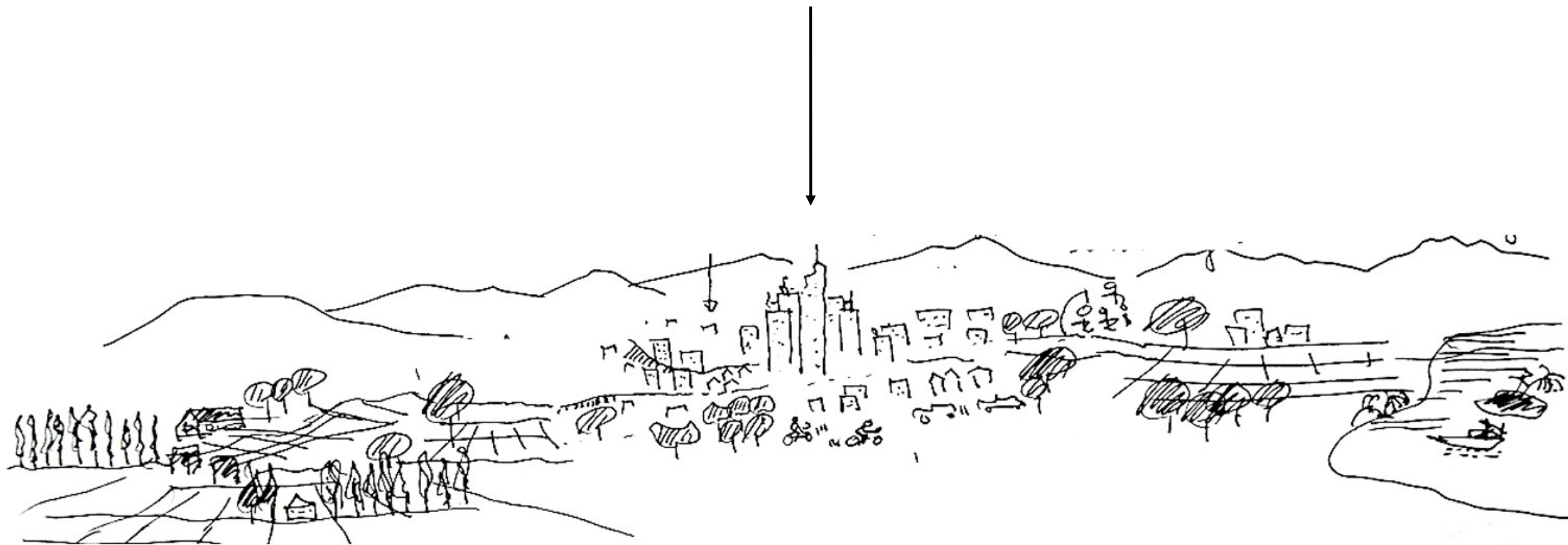→ ...how digital technology is blurring differences between North & South.

1

The Platform Revolution

The City

Çatal Hüyük: 7500 BCE
2500 Inhabitants

9 000 years →

Tokyo: 2022 AD
37 million inhabitants

Spectacular forms …

Informal City

80 %
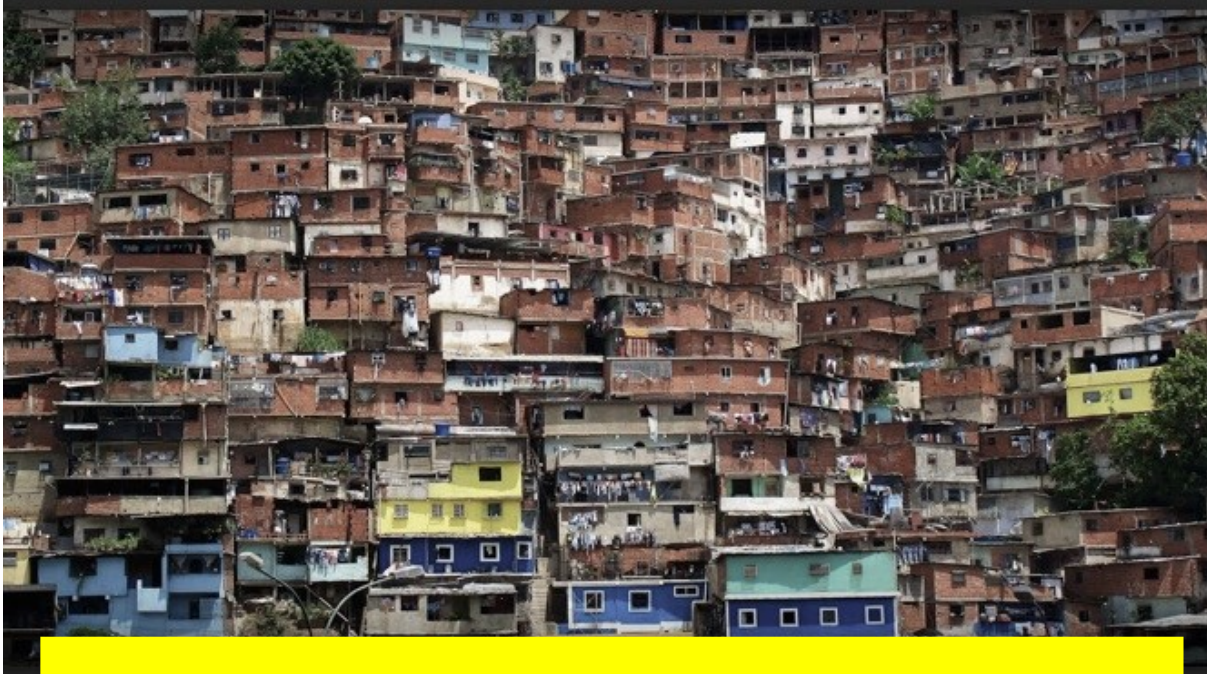
...growth has been uneven ...

Formal City

20 %

Source: *Radical Cities: Across Latin America in Search of a New Architecture* (Justin McGuirk, 2014)

Masato Watanabe

==⇩==
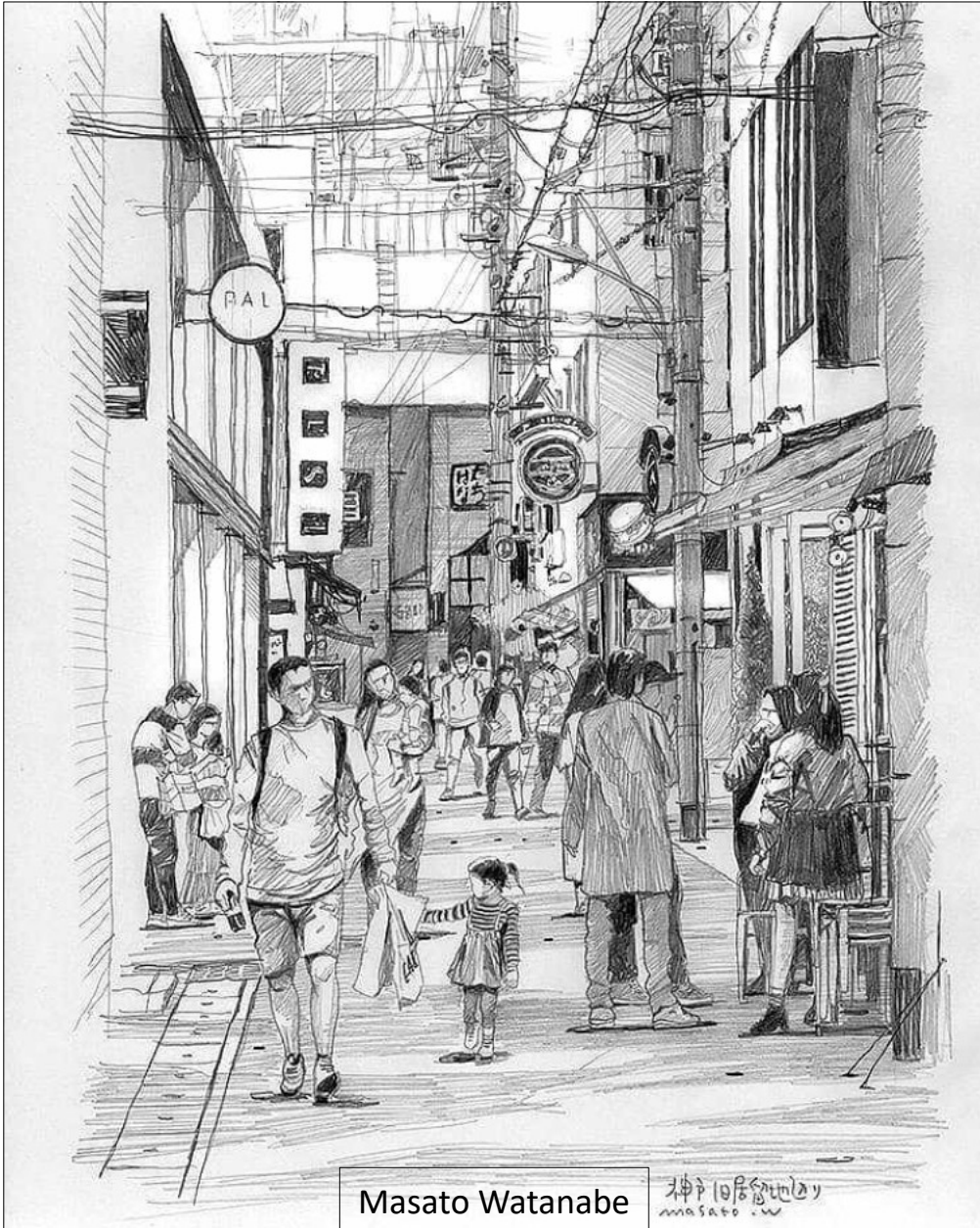
...but...throughout history cities had two things in common:
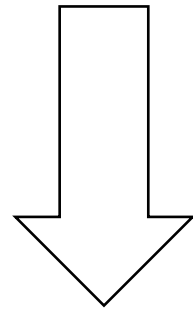
- Humans: sole actors
- Humans: decision makers
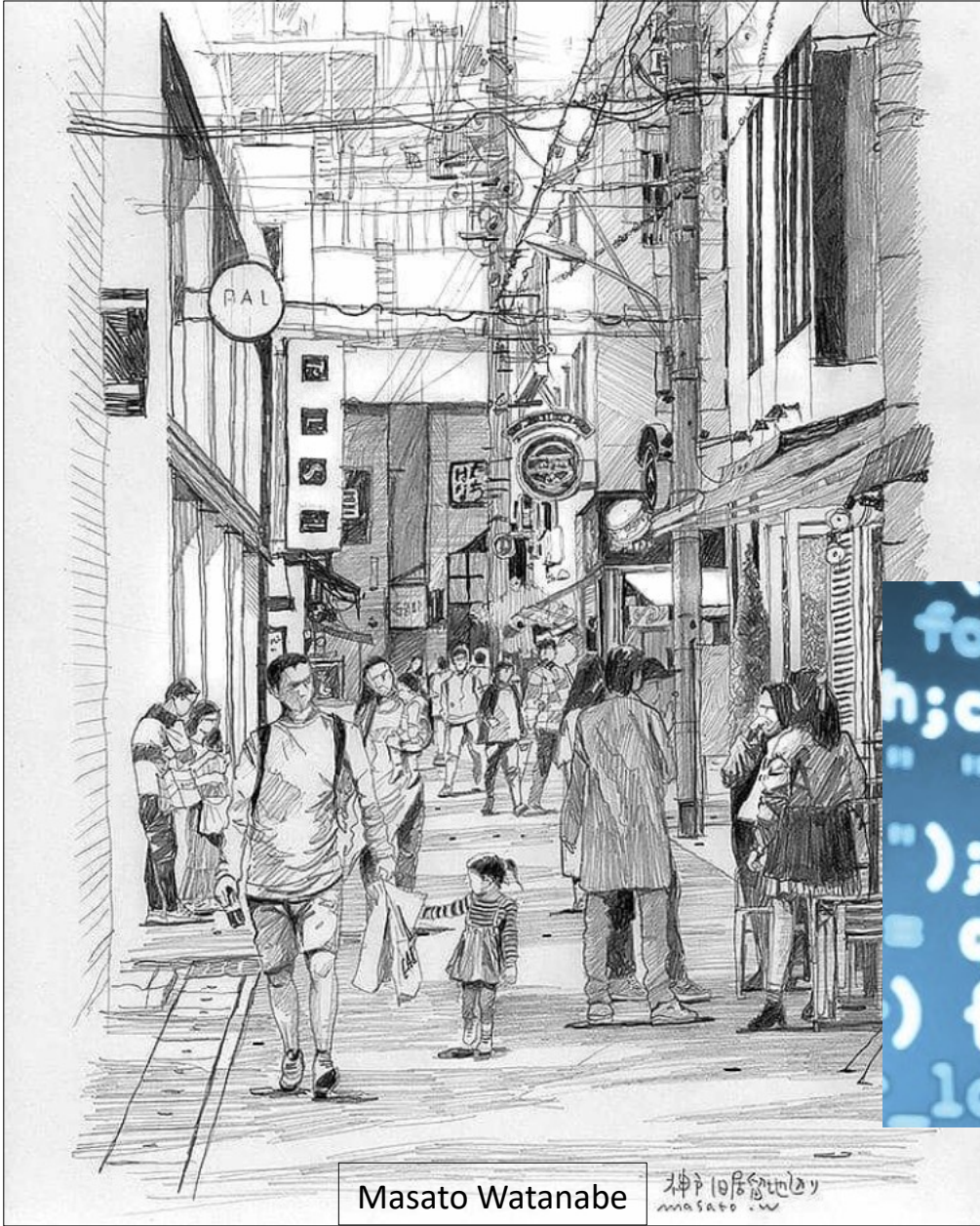
First time in history –

Non-humans entities are making decisions

Algorithms & AI

Masato Watanabe

New Epoch

Everything is changing....

Digitalisation

Algorithms

IoT

CODE_SPACES

Cloud Computing   3D Printing

Transhumanism

Artificial Intelligence   E-Health

Autonomous Vehicles

E-Government   Big Data   Industry 4.0

Inorganic Life

Maschine Learning   NBIC Covergence   Robots

Deep Learning   Digital Platforms

Connectivity   Automation   Blockchains

AVENUE 21 Automated and Connected Mobility and the City

Project at TU Wien (Daimler Benz Stiftung)

Main driver: **Digital Platforms**

What is a platform?

Connecting people and resources

Platform

entertainment

businesses

mobility

work → Digital Platforms → education

communication

politics

government

8.93 million apps

(Forbes 2020)

204 billion downloads

(Clement 2020)

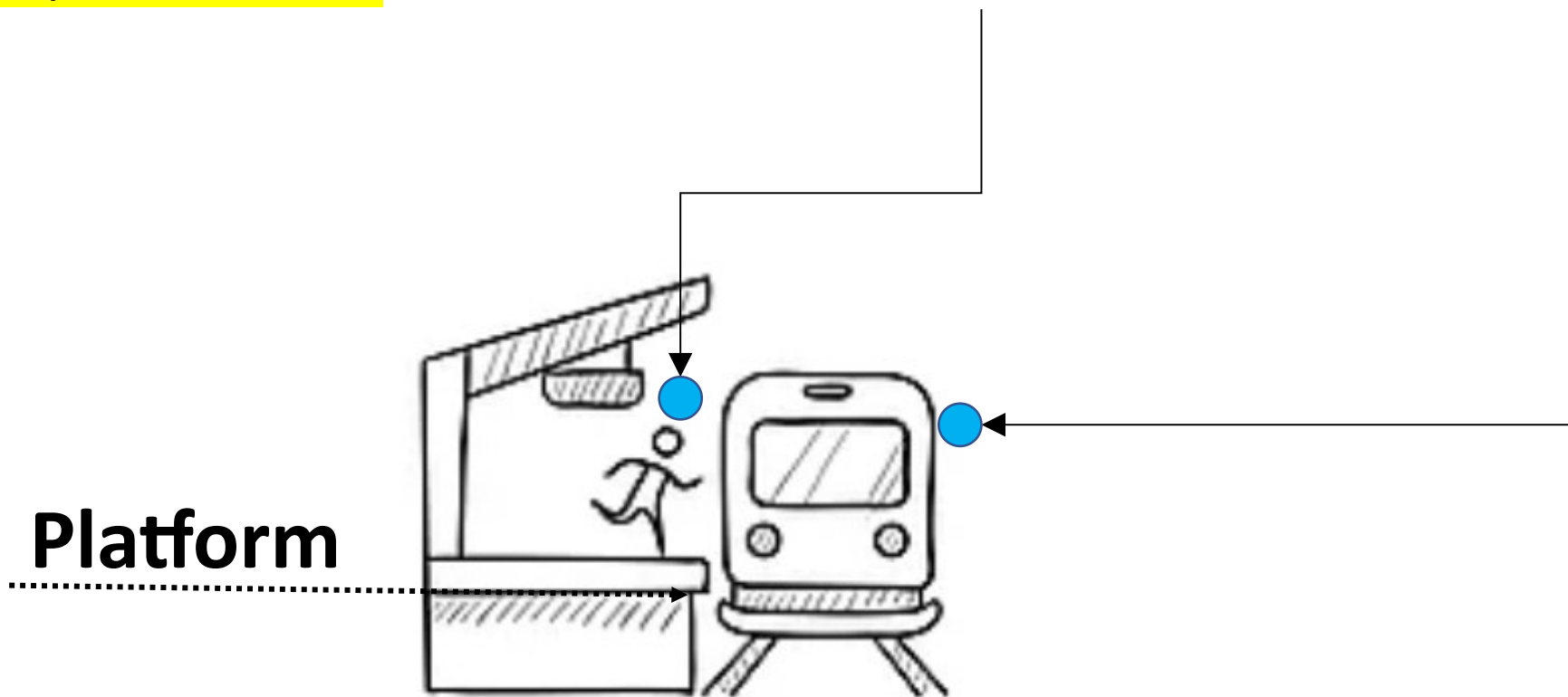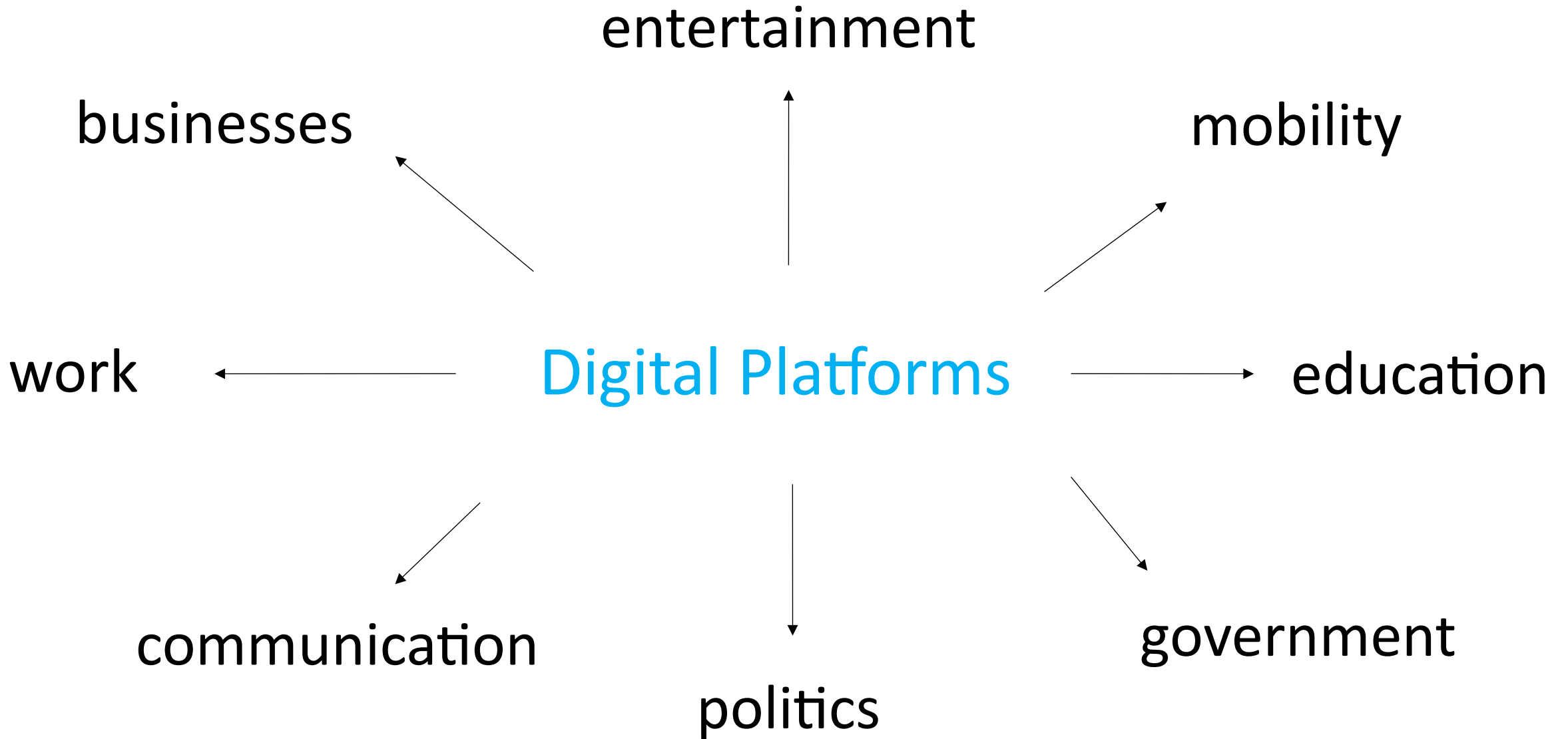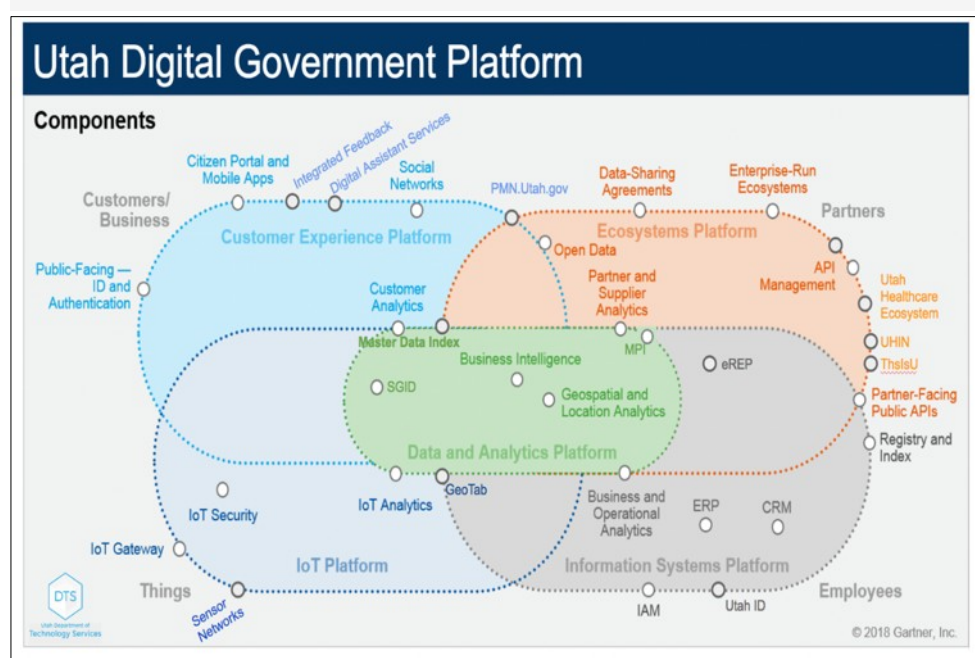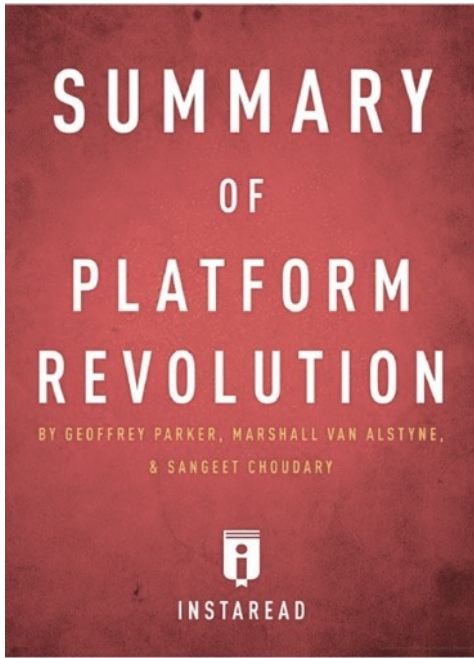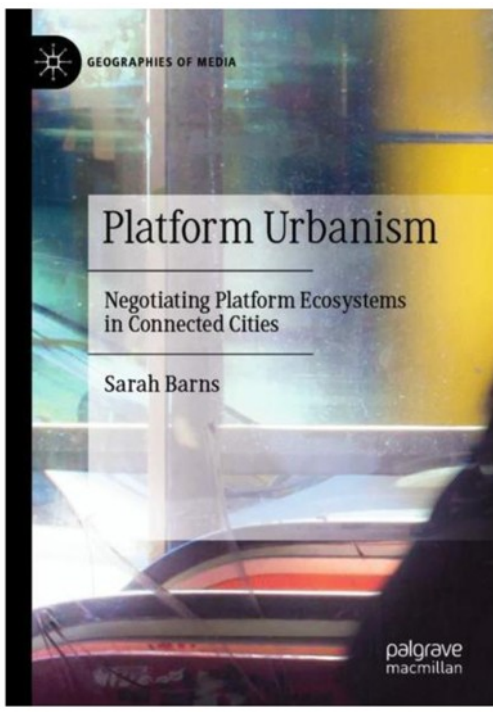THE PLATFORM SOCIETY

PUBLIC VALUES IN A CONNECTIVE WORLD

JOSÉ VAN DIJCK | THOMAS POELL | MARTIJN DE WAAL

GEOGRAPHIES OF MEDIA

Platform Urbanism

Negotiating Platform Ecosystems in Connected Cities

Sarah Barns

palgrave macmillan

THE ASPEN INSTITUTE COMMUNICATIONS AND SOCIETY PROGRAM

THE CITY AS PLATFORM
How Digital Networks Are Changing Urban Life and Governance

David Bollier, Rapporteur

THE ASPEN INSTITUTE

decidim

vTaiwan

Public Consultation
(Obtain feedback, analysis, opinions, or decisions on proposals or actions)

City-as-a-Platform
Smart Urban Development Governance with Collective Knowledge-Based Platform Urbanism

1 Information and Services
(Provide information and services online)

3 Government and Society Involvement
(Work directly with the public to ensure that their concerns and aspirations are under-stood and considered)

4 Collaboration and Application Development
(Provide open data in machine language, for the development of applications that facilitate and improve the quality of life in cities)

DEEP Intelligence

OPENGOV

SUMMARY OF PLATFORM REVOLUTION

BY GEOFFREY PARKER, MARSHALL VAN ALSTYNE, & SANGEET CHOUDARY

INSTAREAD

Government as a Platform

Tim O'Reilly
@timoreilly
GDS Sprint 15
February 2, 2015

O'REILLY

Utah Digital Government Platform

Components

Customers/Business

Citizen Portal and Mobile Apps
Integrated Feedback
Digital Assistant Services
Social Networks
PMN.Utah.gov
Data-Sharing Agreements
Enterprise-Run Ecosystems
Partners

Customer Experience Platform

Ecosystems Platform

Public-Facing — ID and Authentication

Open Data

Partner and Supplier Analytics

Customer Analytics

API Management

Utah Healthcare Ecosystem

UHIN
ThisIsU

Master Data Index

Business Intelligence

MPI

eREP

Partner-Facing Public APIs

SGID

Geospatial and Location Analytics

Data and Analytics Platform

Registry and Index

IoT Security

IoT Analytics

GeoTab

Business and Operational Analytics

ERP

CRM

IoT Gateway

IoT Platform

Information Systems Platform

Employees

DTS
Utah Government of Technology Services

Things

Sensor Networks

IAM

Utah ID

© 2018 Gartner, Inc.

"City-as-a-Platform"

Explaining "City-as-a-Platform"

$$\downarrow$$

"Data Pump"

(AVENEUE 21, Banerjee 2021)

Ecosystem of Digital Platforms

Connecting people, machines and resources

"Digitizalisation"

Digital Space
World Wide Web

Baidu

Apple

Facebook

Tencent

Microsoft

Google

Amazon

WeChat

Spotify

Didi

YouTube

WhatsApp

A

Netflix

Wiki

Uber

Z

Open Street Map

Y

Trip Advisor

Airbnb

G-a-a-P

C-a-a-P

Car To Go

Infrastructural Platforms
• Offering foundational structures to build sectoral platforms (+ Apps)

③ Processing data

② Storing data

Sectoral Platforms
• Predictive Analytics
• Datafication, selection and commodification of data
• Creating services for everyday life.

④ Offering services

① Capturing Data

Physical Space
The City

"Digitization"

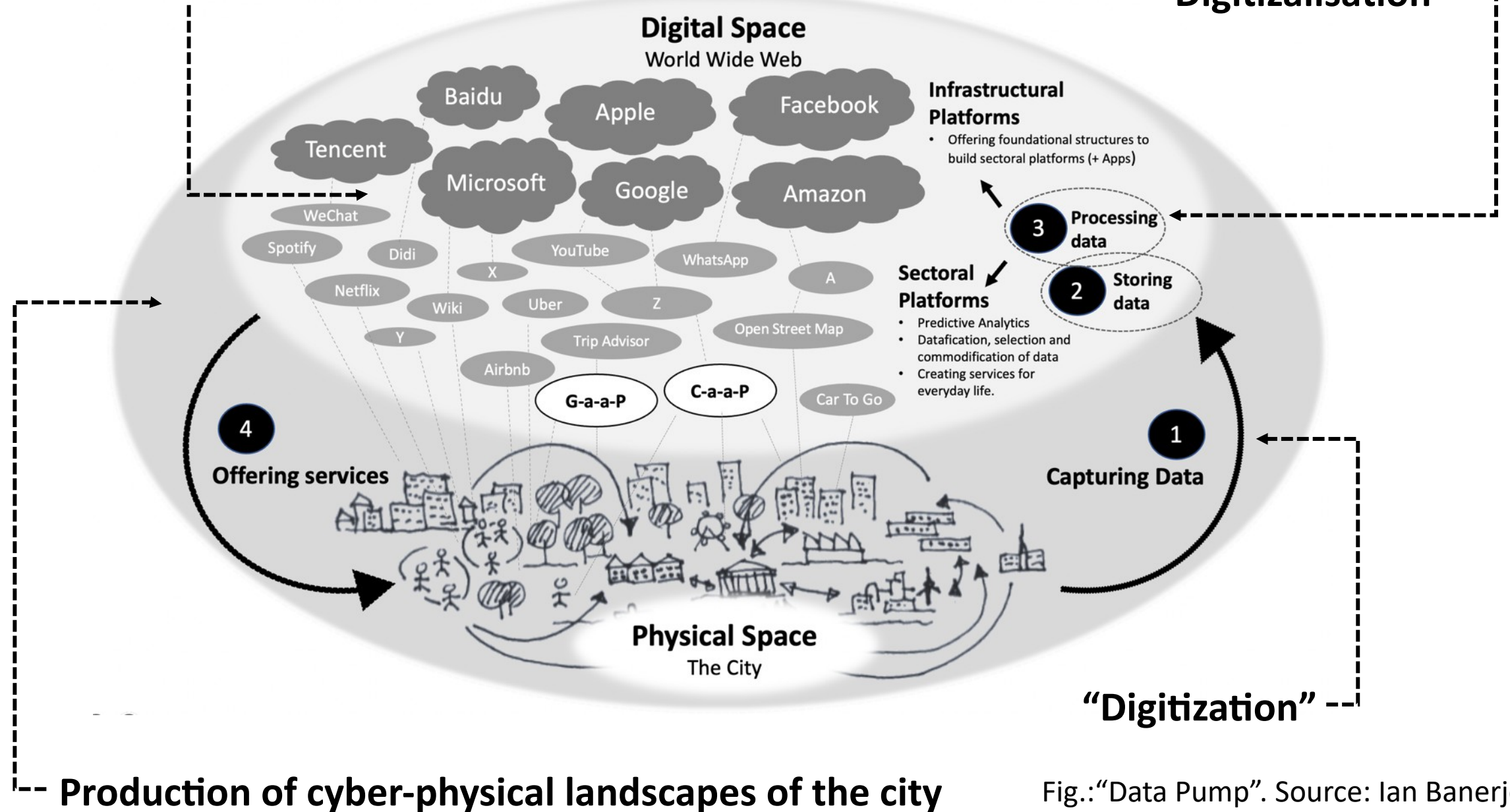**Production of cyber-physical landscapes of the city**

Fig.:"Data Pump". Source: Ian Banerjee

Digital platforms are the
new infrastructural foundations of cities.
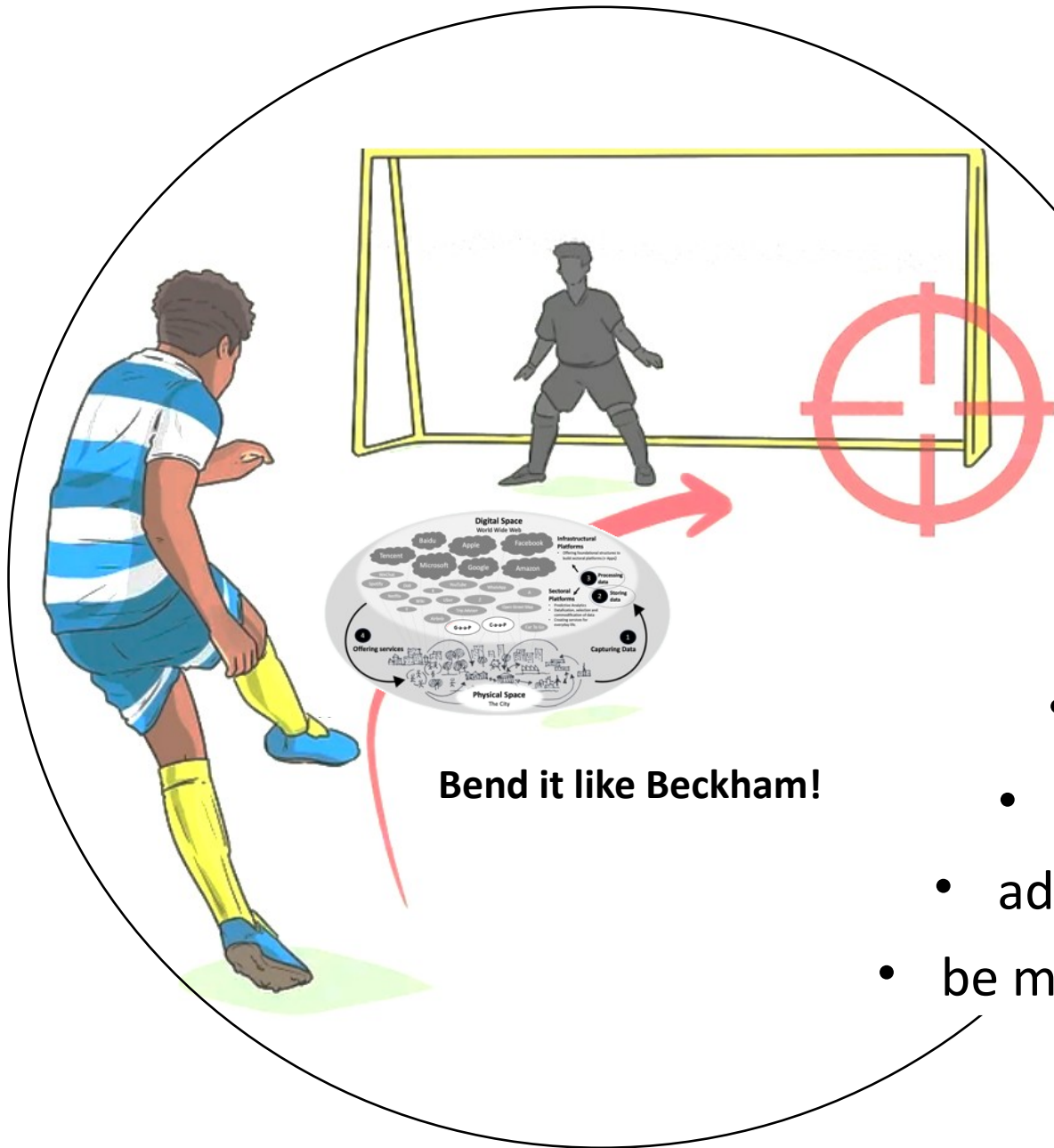
The Problem
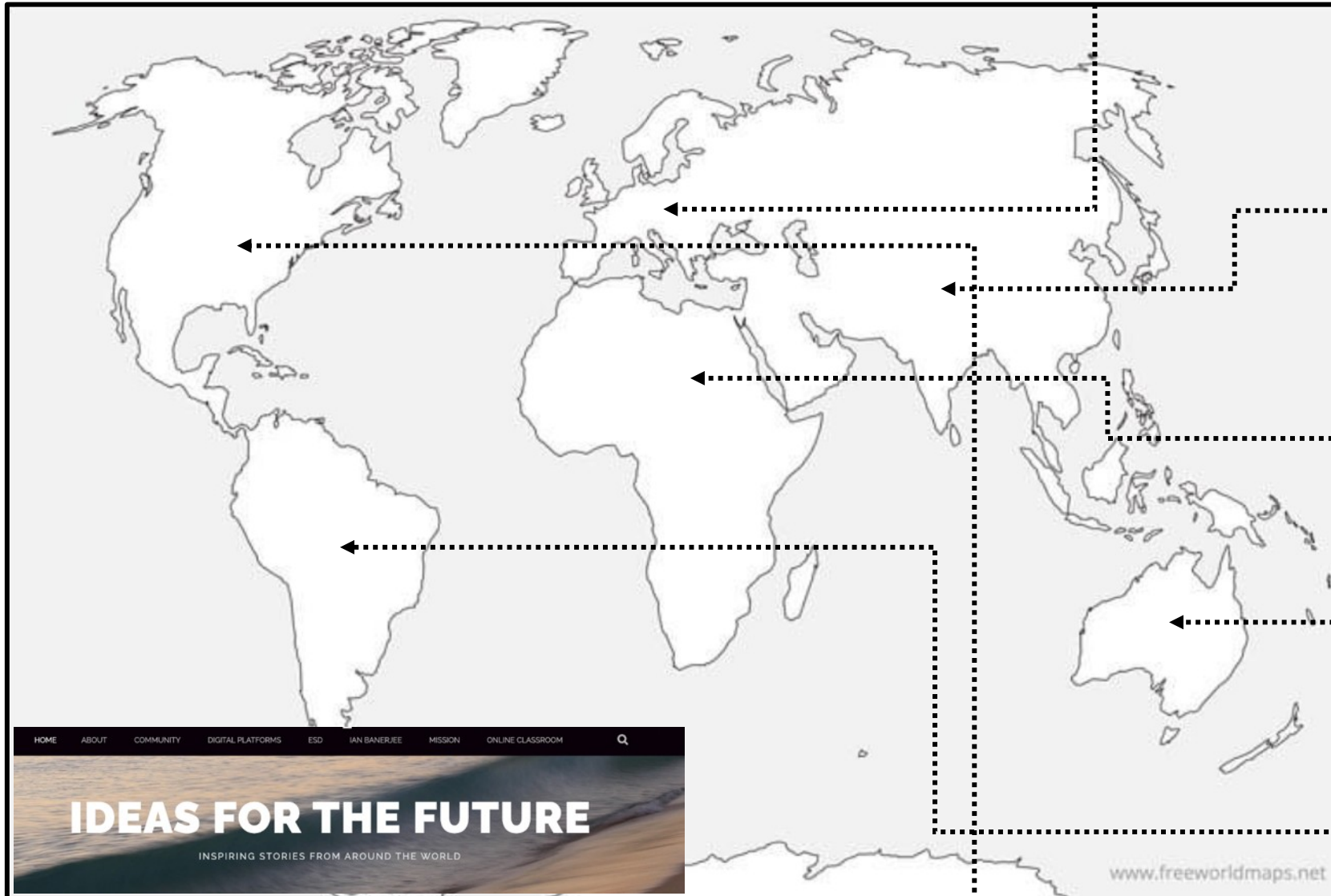It's a commercial project !

"The Big Five"

Is there a way out?

Bend it like Beckham!

"Transformative Platforms"

- address real problems ?
- more equitable and locally specific ?
- address environmental issues ?
- be more participatory ?

My new online classroom …

IDEAS FOR THE FUTURE
INSPIRING STORIES FROM AROUND THE WORLD

www.futureskillsobservatory.wordpress.com

Europe

Finland: City-as-a-Platform
Participatory Innovation platforms
e-Estonia
Digital Government

Digital LITuania
Hub for Innovation

Asia

Malaysia
Think City, Georgetown

Greece
Open Education Resources

Africa

Ghana:
Ghana Education Project
Ruanda
*Centre for Fourth
Industrial Revolution*

Kenya
iHub, Nairobi
Ethiopia
Digital Ethiopia 2025

South America

Mexico
Visor Urbano
Brazil

www.freeworldmaps.net

2 Transformative Platforms: 4 Cases

1

Guadalajara, Mexico

Visor Urbano

Tackling corruption with an
open sourced digital platform

Gudalajara, Mexico

GovTech

Challenge

- construction sector is one of the main sites of corruption.

Aim

- to enable corruption-free development

Jalisco Urban Viewer

Here you will be able to know the applicable requirements to open your business and process your license completely online.

Know the requirements

Bloomberg Philanthropies   Jalisco

What can you check on the Visor Urbano platform?

Beneficios para la ciudad

- Una ciudad organizada, con trámites del desarrollo urbano eficientes y efectivos.

- Visor Urbano tendrá su código abierto para su implementación en otras ciudades.

- Incrementa los ingresos al tener una recaudación eficiente.

- Trámites transparentes y sin corrupción.

- Ser una ciudad reconocida con prácticas de Gobierno Abierto.

- Evitar el pago de licenciamientos, con el uso de tecnologías

Idea
Give a license only give if certain facts are made transparent

a) fostering transparency
b) providing public information
b) reducing the digital gap
c) building confidence of citizens in their governments
d) promoting "open data" and digital processes.

Success

- corruption reduced by about 70% in one year

- after one year- replication in 25 cities

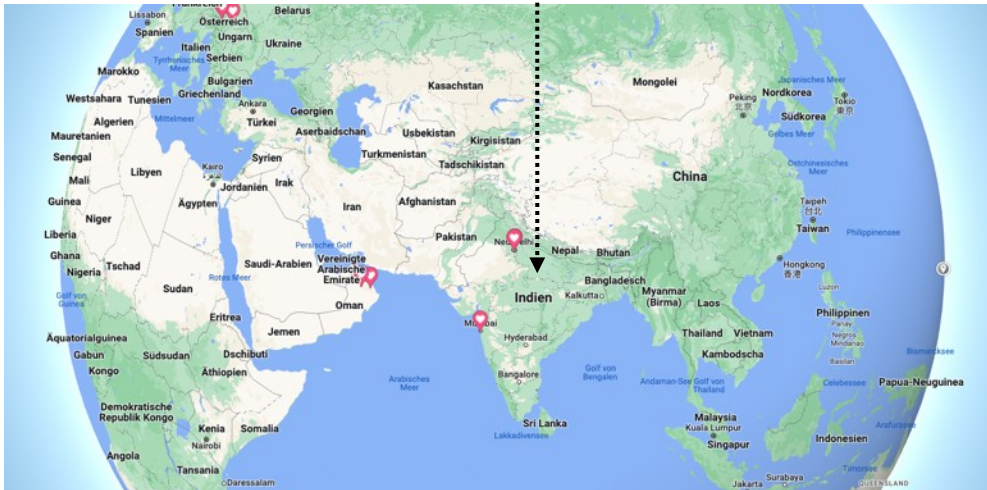- scaling up to 125 municipalities in Jalisco

Interesting factor
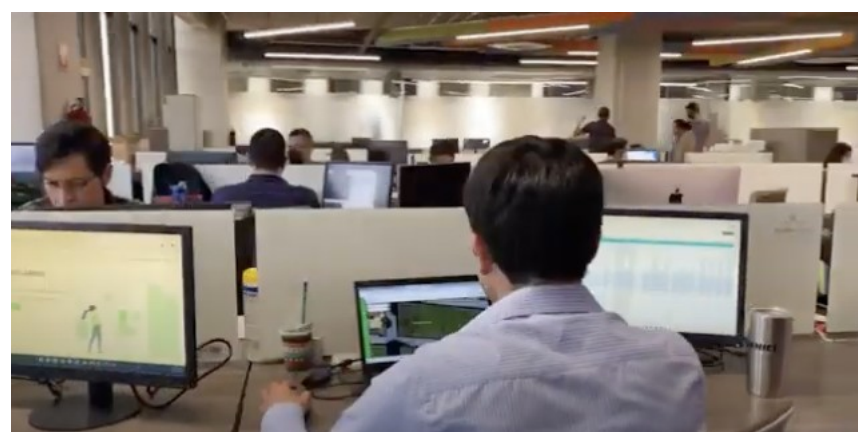
The Team

- Young
- Professional
- Optimistic

2

India

UPI
Unified Payments Interface

Platform for real-time financial transactions
(launched 2016)

FinTech

Challenge

- 2009: 145 mill. families had no access to any form of banking.
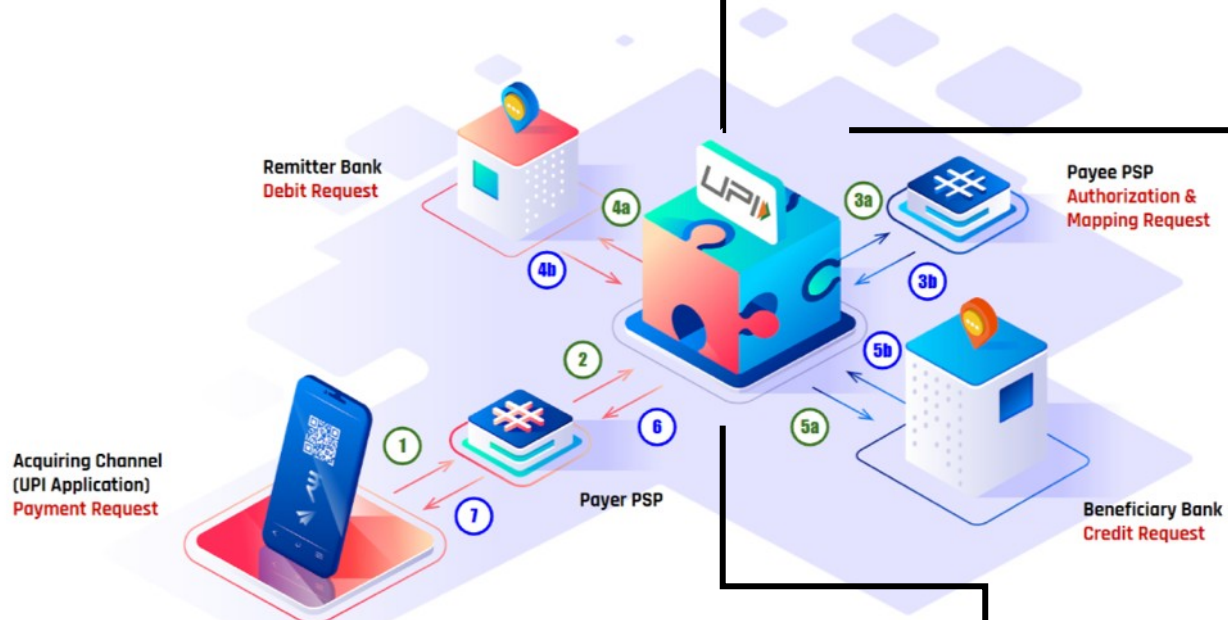- 2014: **52 %** of adult population had a bank account

Aim

- Financial inclusion
- Everyone should have a bank account
- Formalization of economy
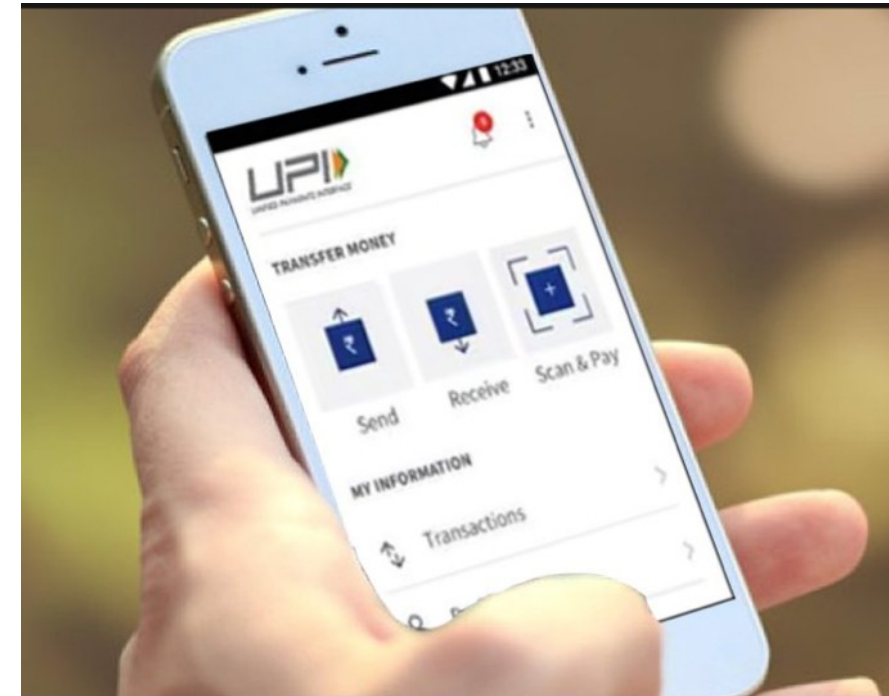
UPI Platform
Mobile Payment Sevice Platform

UPI Transaction Flow

Remitter Bank
Debit Request

4a
4b

Payee PSP
**Authorization &
Mapping Request**

3a
3b

2

5b

Acquiring Channel
(UPI Application)
Payment Request

1
6
7

Payer PSP

5a

Beneficiary Bank
Credit Request

- **Connecting 358 banks**
- 6.7 billion transactions/m
- US$140 billion/m

Feb 2022

Data source: World Bank

Largest real-time transaction platform of the world ($1 trillion /FY 2021–22)

Data source: World Bank

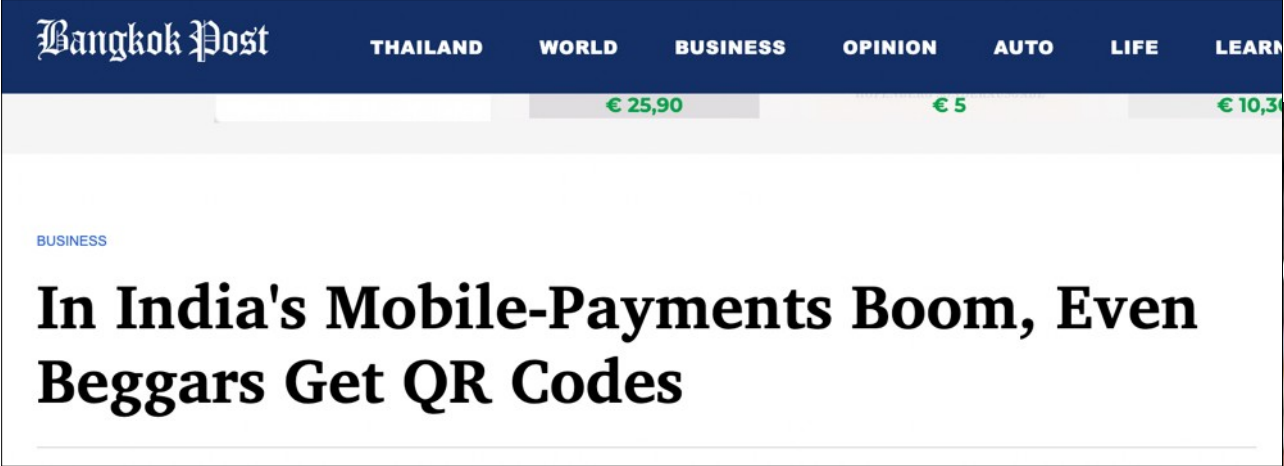**Success**

- 2017: 79.8% of adults had an account.

- 2020: over 330 million people brought into the formal financial sector.

- 2021: 48.6 billion digital payments (double of China)

- Future: could connect 400 million users in distant rural areas.

Data source: World Bank

Bangkok Post, 30 May, 2022

QR Code

Bangkok Post

THAILAND WORLD BUSINESS OPINION AUTO LIFE LEARN

BUSINESS

In India's Mobile-Payments Boom, Even Beggars Get QR Codes

"...even beggars get QR codes..."

Interesting factor

Responsible organisation: A non-profit organisation
NPIC- National Payments Corporation of India

- digital-payment systems is seen as a <u>public good.</u>

- mandate is to <u>"facilitate affordable payment"</u>.

- <mark>System <u>running at loss</u> (!)</mark>

Slums of New Delhi

TU Wien-
Excursion
to India (2014)

Sarah Habersack

Jens S. Dangschat

3

Ghana

Greece

Education
Open Educational Resources
(OER)

EduTech

Challenge

- Education for All (EFA)
- Quality education

Aim

- citizen empowerment
- high quality information
- dissemination of knowledge

==…without public engagement privatization will take over==

4

Taiwan

Open Gov
Tech-based democratic culture

The largest civic-tech ecosystem of the world

CivicTech

Sunflower Movement: 2014

TAIWAN

- Early 1990s: multi-party democracy
- 2014: Sunflower Movement
- parliament occupied for twenty-four days
- 50 civil society groups develop collective purpose
- Aim: reform of institutions

Staggering success

Principles & Platforms

Political principles
1. Radical Transparency
2. Civic Participation
3. Rough Consensus

Social and economic aims
1. Increasing capacity for (social) innovation
2. Problem solving capacity
3. Crowdsourcing intelligence

Methods and Tools
1. Orchestrating civic platforms
2. Creating an "collaborative environment"

Core Platforms.

g0v

vTaiwan

POL.IS

JOIN

Created one of the largest civic tech community in the world.
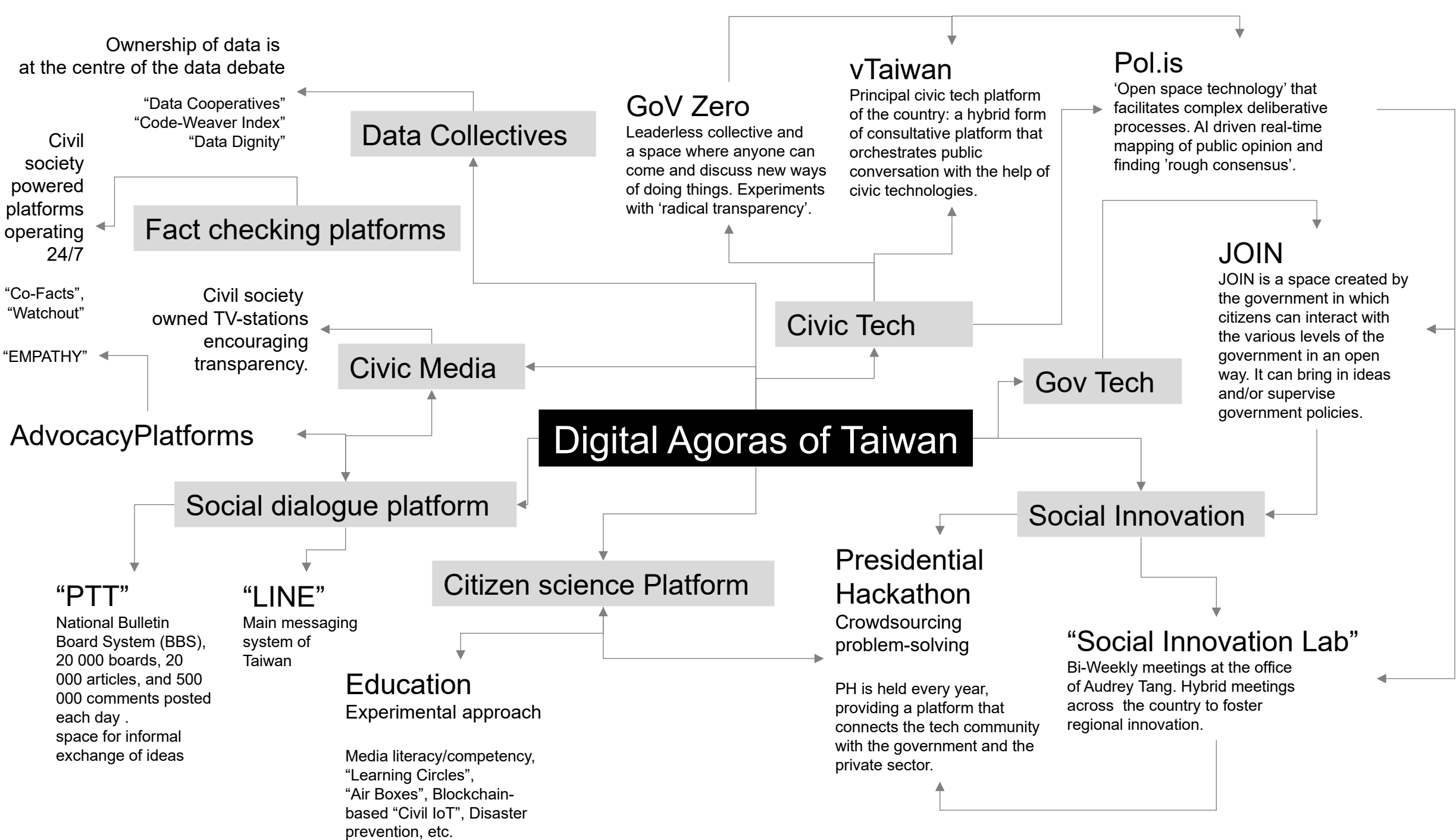
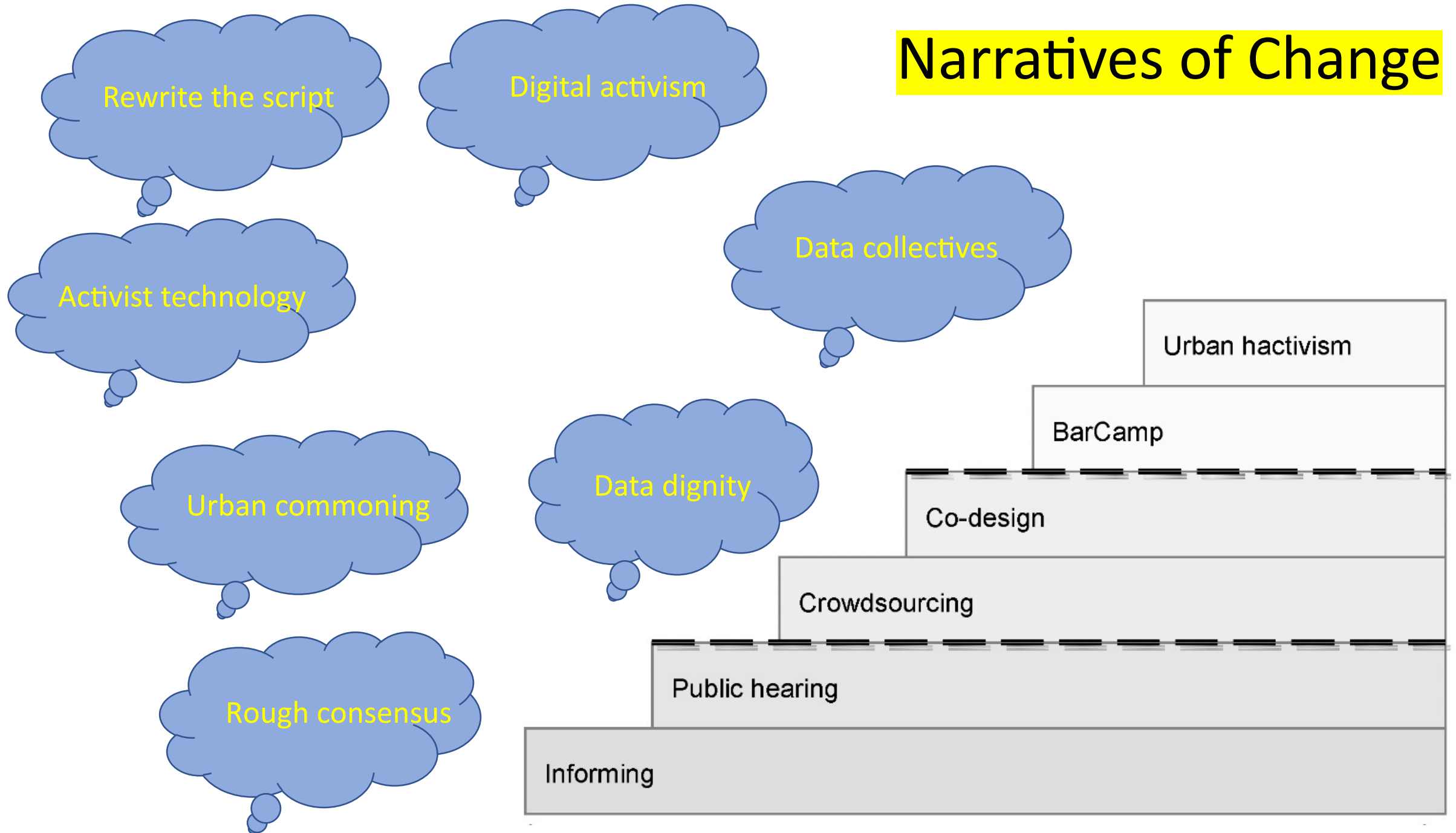Share

Opinion Group: 1 2   Majority Opinion

Anonymous
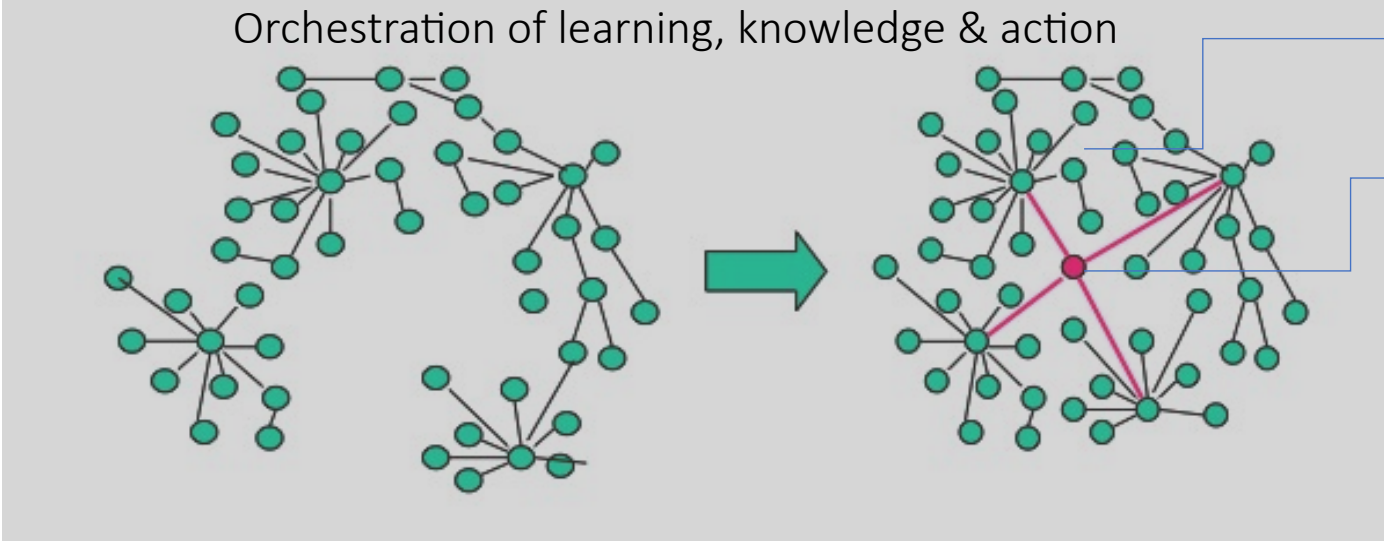我覺得應該審核人員，乘客保障，為駕權益都要兼顧，最或要還是安全第一

92% Agreed

vTaiwan: Screenshot from the Pol.is mass deliberation on ridesharing

Ownership of data is at the centre of the data debate

"Data Cooperatives"
"Code-Weaver Index"
"Data Dignity"

Civil society powered platforms operating 24/7

"Co-Facts", "Watchout"

"EMPATHY"

Data Collectives

Fact checking platforms

GoV Zero
Leaderless collective and a space where anyone can come and discuss new ways of doing things. Experiments with 'radical transparency'.

vTaiwan
Principal civic tech platform of the country: a hybrid form of consultative platform that orchestrates public conversation with the help of civic technologies.

Pol.is
'Open space technology' that facilitates complex deliberative processes. AI driven real-time mapping of public opinion and finding 'rough consensus'.

Civic Tech

JOIN
JOIN is a space created by the government in which citizens can interact with the various levels of the government in an open way. It can bring in ideas and/or supervise government policies.

Civil society owned TV-stations encouraging transparency.

Civic Media

AdvocacyPlatforms

Digital Agoras of Taiwan

Gov Tech

Social dialogue platform

Citizen science Platform

Social Innovation

"PTT"
National Bulletin Board System (BBS), 20 000 boards, 20 000 articles, and 500 000 comments posted each day .
space for informal exchange of ideas

"LINE"
Main messaging system of Taiwan

Education
Experimental approach

Media literacy/competency, "Learning Circles", "Air Boxes", Blockchain-based "Civil IoT", Disaster prevention, etc.

Presidential Hackathon
Crowdsourcing problem-solving

PH is held every year, providing a platform that connects the tech community with the government and the private sector.

"Social Innovation Lab"
Bi-Weekly meetings at the office of Audrey Tang. Hybrid meetings across the country to foster regional innovation.

Transformative Platforms
& Narratives of Change

Ian Banerjee

ian.banerjee71@gmail.com