

Agenda

<1> DPI 101

<2> Why DPI & Why Now

<3> DPI & Ministries of Finance?

Institute for
Innovation and
Public Purpose



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Global Challenge: Financing (Digital) Government

Who led the digital transformation of your organization?

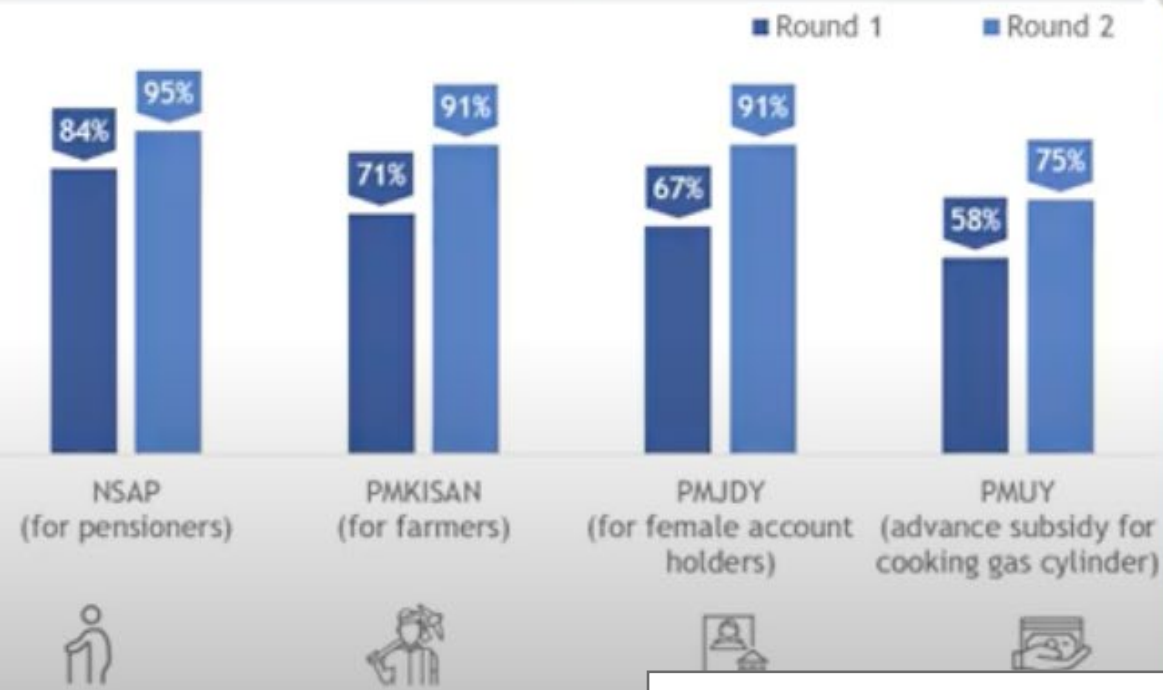
A) CEO

B) CTO

C) COVID-19

The Indian government used the existing Direct Benefit Transfer (DBT) system to deposit USD 9.3 billion in the bank accounts of 420 million-plus beneficiaries under PMGKY

Percentage of eligible households who received cash benefits under PMGKY (MSC's assessment)



India's DBT ecosystem allowed the immediate transfer of PMGKY cash benefits.

During the second quarter of 2020-21 (April to June), more than 830 million transactions were processed, while 1.47% failed.

However, several issues persist around the failure of DBT transactions, such as dormant or closed bank accounts, mismatch in bank details, inactive Aadhaar numbers, among others.

NSAP: National Social Assistance Programme; PMKISAN

RECOVR | CASE STUDY

JULY 2021

Togo's Novissi Cash Transfer: Designing and Implementing a Fully Digital Social Assistance Program during COVID-19



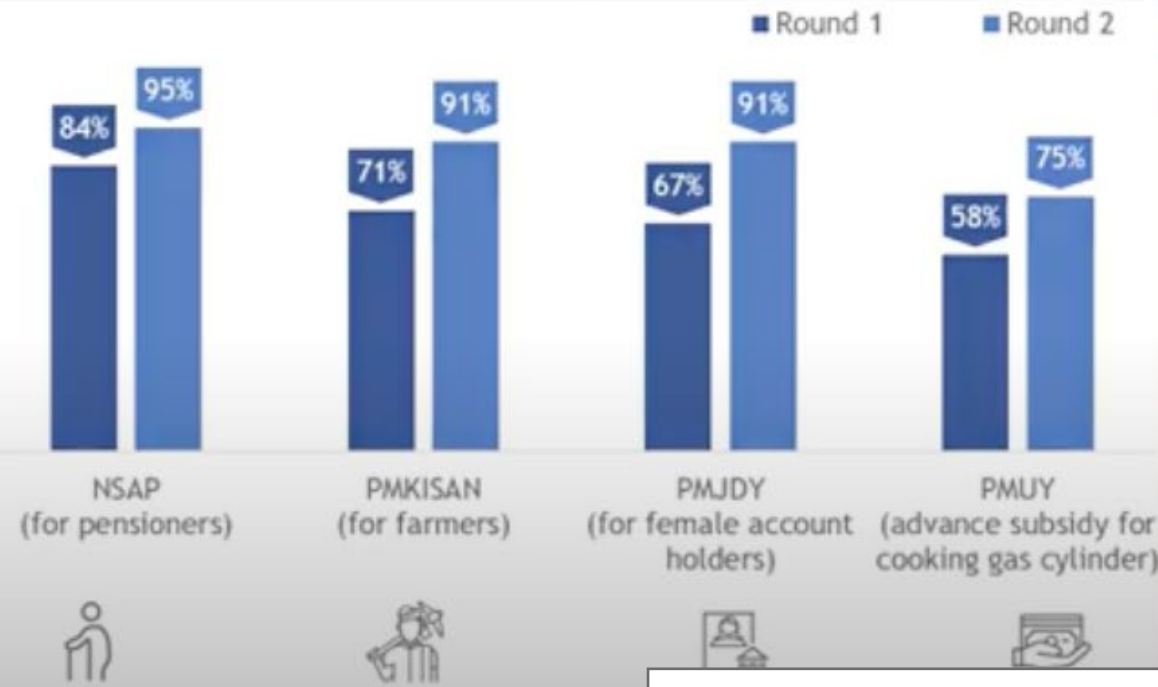
In April 2020, the Ministry of Digital Economy and Digital Transformation (MENTD) of Togo launched the Novissi cash transfer scheme. An unconditional cash transfer (UCT) to assist informal workers whose livelihoods have been upended by the coronavirus pandemic, Novissi is a fully digital social assistance program. As of March 2021, Novissi has reached 819,972 beneficiaries and disbursed approximately US\$23.9 million (13,308,224,040 FCFA). This case study details the design process for the program, and its implementation during the coronavirus pandemic, which can interest leaders of social assistance programs in other contexts. It also highlights lessons learned on the use of mobile money to support fully digital social assistance.

Lessons Learned

The fast-paced nature of the COVID-19 pandemic forced governments to quickly mobilize resources and emergency responses to address simultaneous health and economic crises. By launching a program as comprehensive as Novissi from scratch and implementing it during a prolonged period of crisis, the Togolese government learned several lessons, including:

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Your second stimulus check may be delayed if you changed your bank or moved

PUBLISHED THU, DEC 31 2020-11:50 AM EST | UPDATED THU, DEC 31 2020-2:28 PM EST

Carmen Reinicke
@CSREINICKE

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PROPUBLICA

Millions of People Face Stimulus Check Delays for a Strange Reason: Th...

THE PANDEMIC ECONOMY

Millions of People Face Stimulus Check Delays for a Strange Reason: They Are Poor

The IRS has had trouble getting money to people quickly because millions of Americans pay for their tax preparation thro...

by Paul Kiel, Justin Elliott and Will Young,



THE PANDEMIC ECONOMY
Fiscal Responses to COVID-19

ProPublica power. Sign published.

Last week Financial storefront had received accounts, their coro

account they didn't recognize.

With an officer from the Richmond another officer shouting for people owner told the crowd of about 60, didn't have their money.

EVEN WHEN THE NEWS IS FREE, JOURNALISM IS NOT. SUPPORT INDEPENDENT, FACT-BASED JOURNALISM. DONATE

AP WORLD U.S. ELECTION 2024 POLITICS SPORTS ENTERTAINMENT BUSINESS SCIENCE FACT CHECK ODDITIES HEALTH VIDEO CLIMATE ...

Iowa caucuses Emmy fashion Israel-Hamas war Winter storms Bills beat Steelers

U.S. NEWS

The Great Grift: How billions in COVID-19 relief aid was stolen or wasted



<1> DPI 101

(New)National Infrastructure Thinking

What Government
looks like today,
digitally .

Department

Application

Database



Department

Tax Dept

DMV

Social Services



Department

Tax Dept

DMV

Social Services

Application

Sign On

Address Search

SIN request

Form

Sign On

Address Search

SIN request

Form

Sign On

Address Search

SIN request

Form



Department

Tax Dept

DMV

Social Services

Application

Sign On

Address Search

SIN request

Form

Sign On

Address Search

SIN request

Form

Sign On

Address Search

SIN request

Form

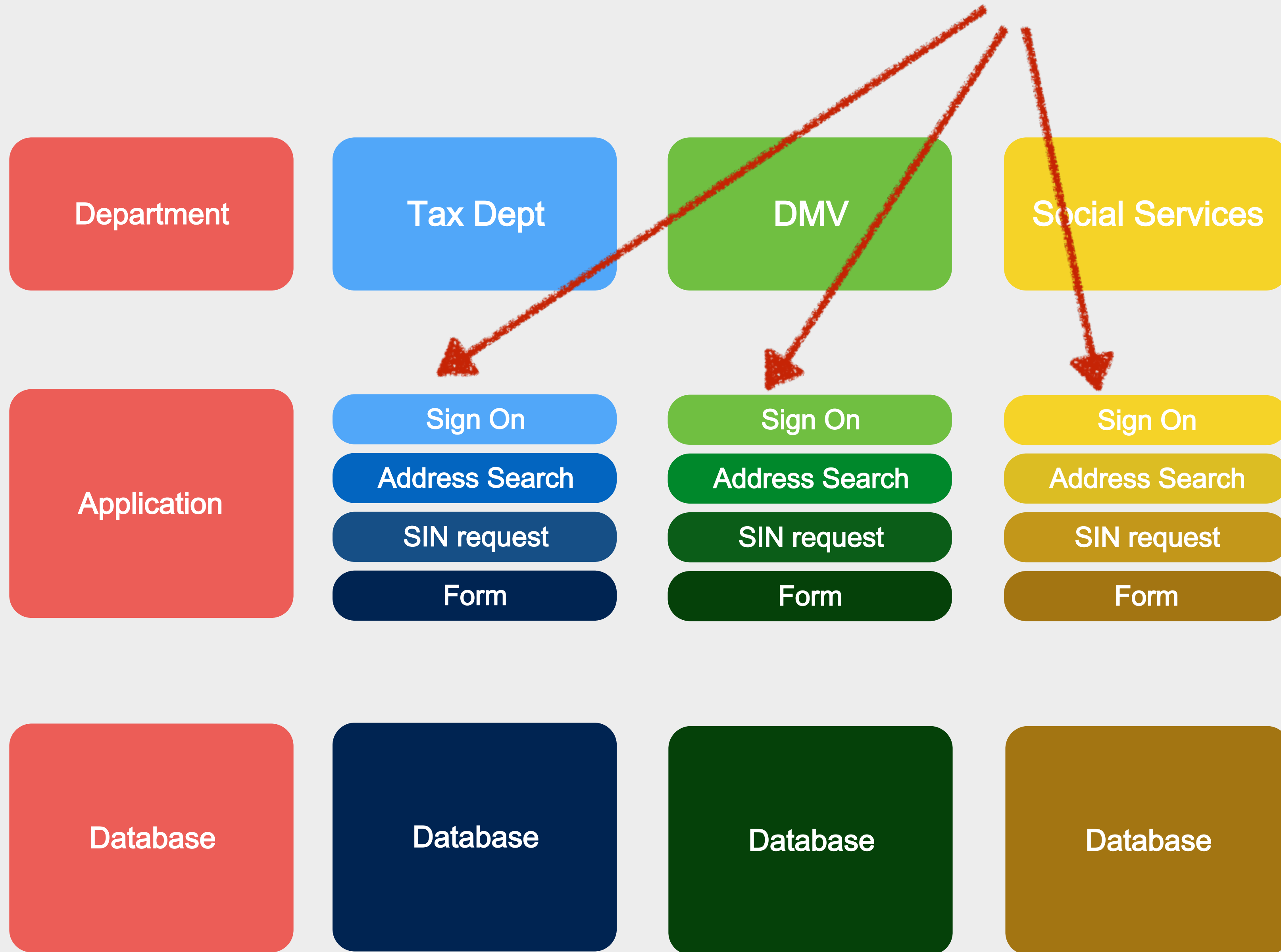
Database

Database

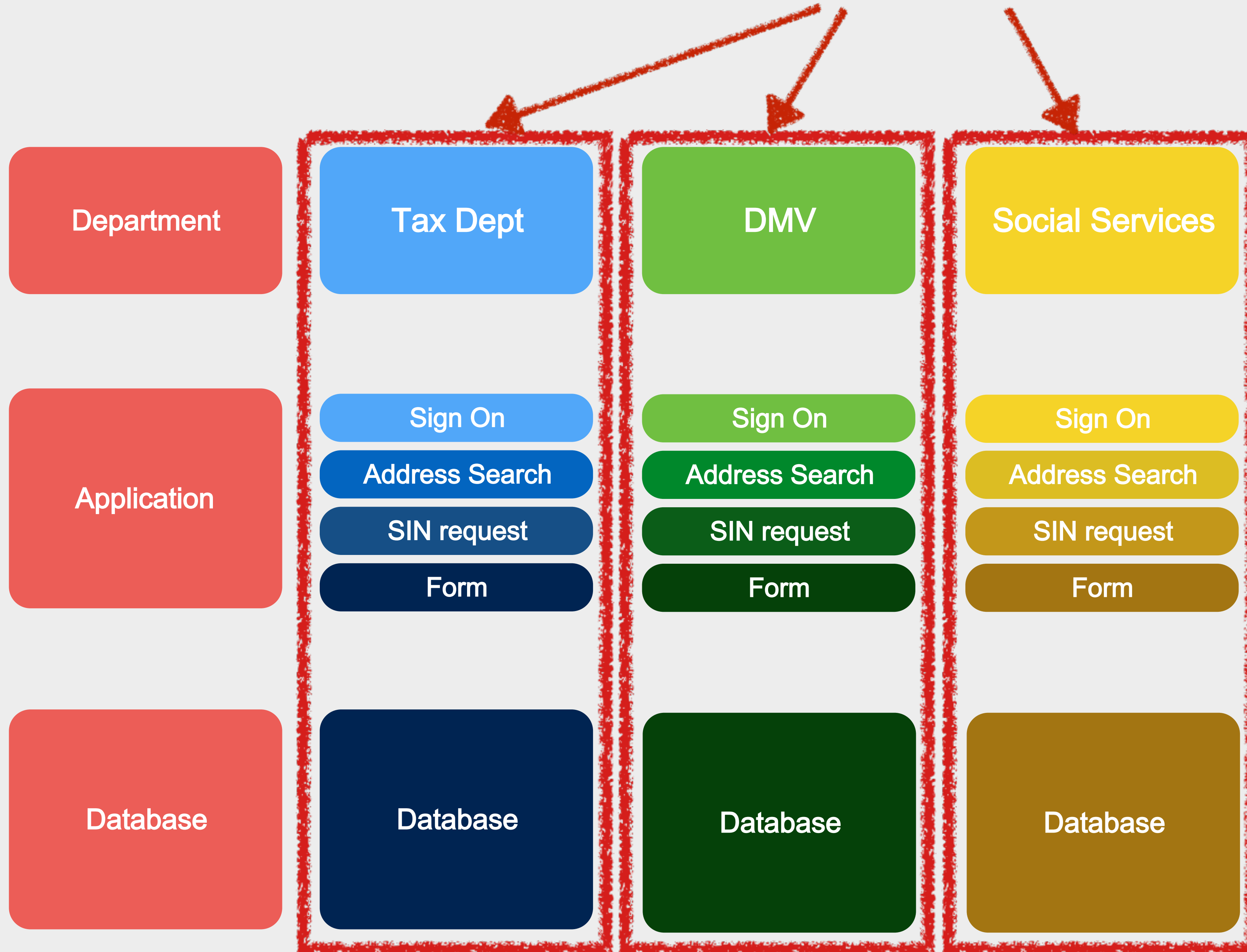
Database

Database

Duplication, Few standards, etc...



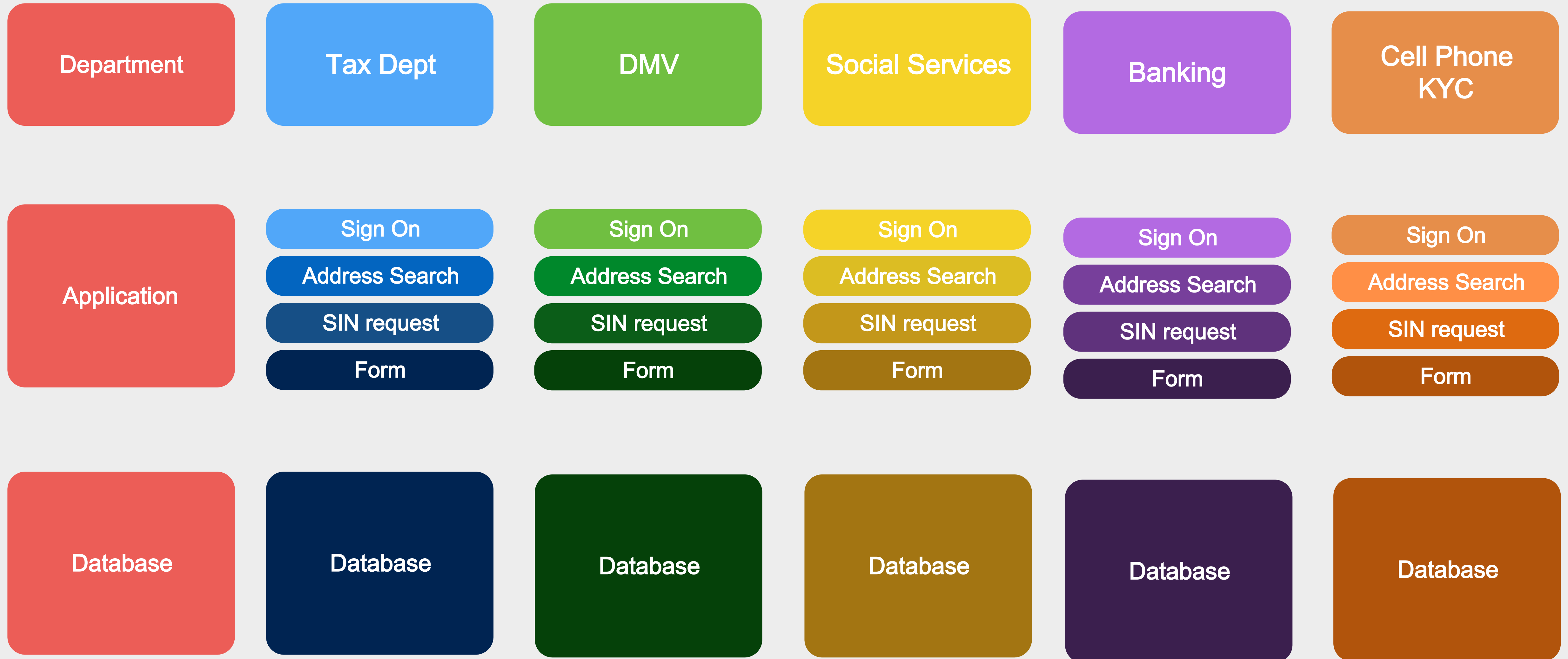
Vertical accountabilities



What Society looks like
today, *digitally* .

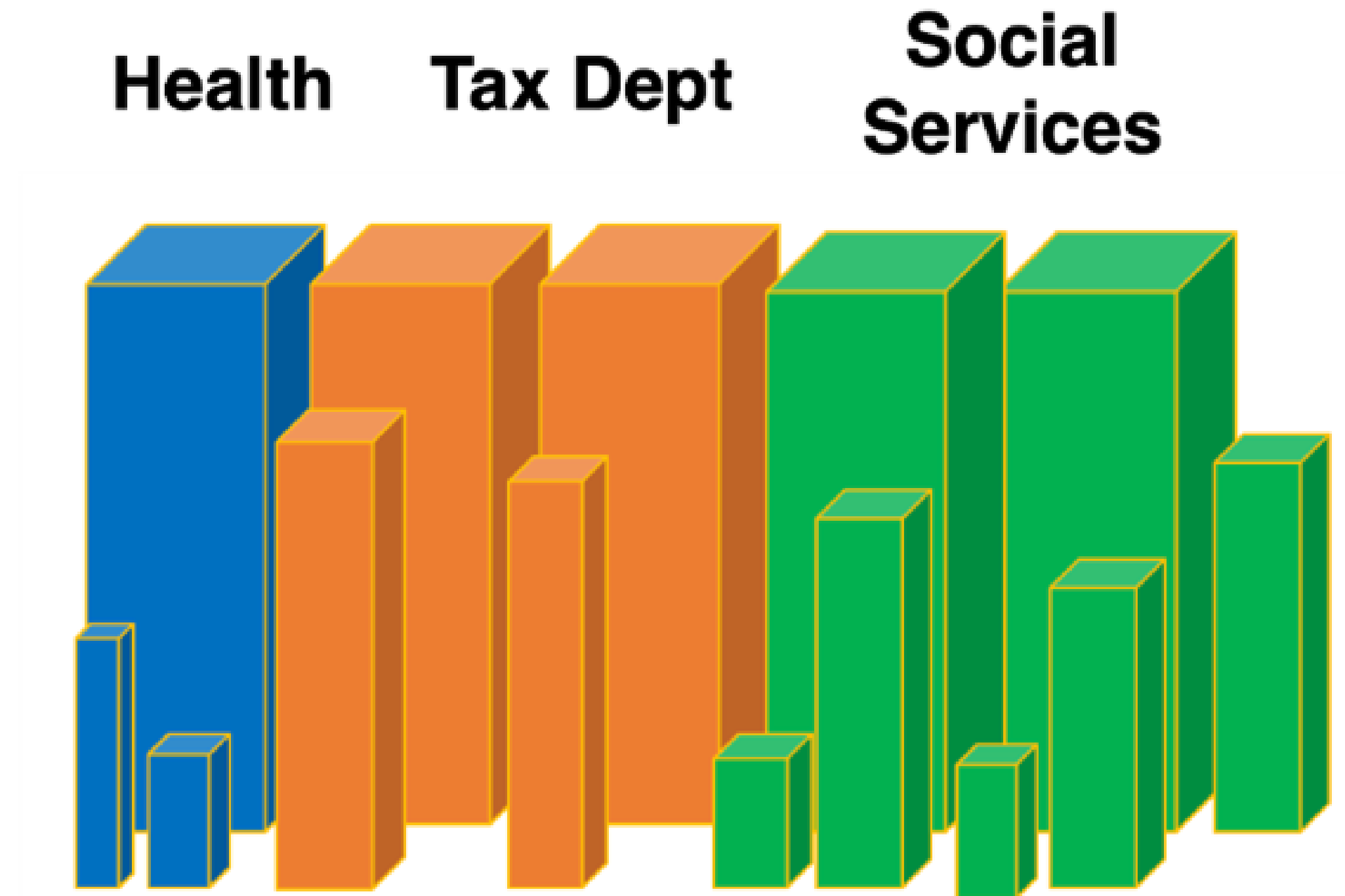
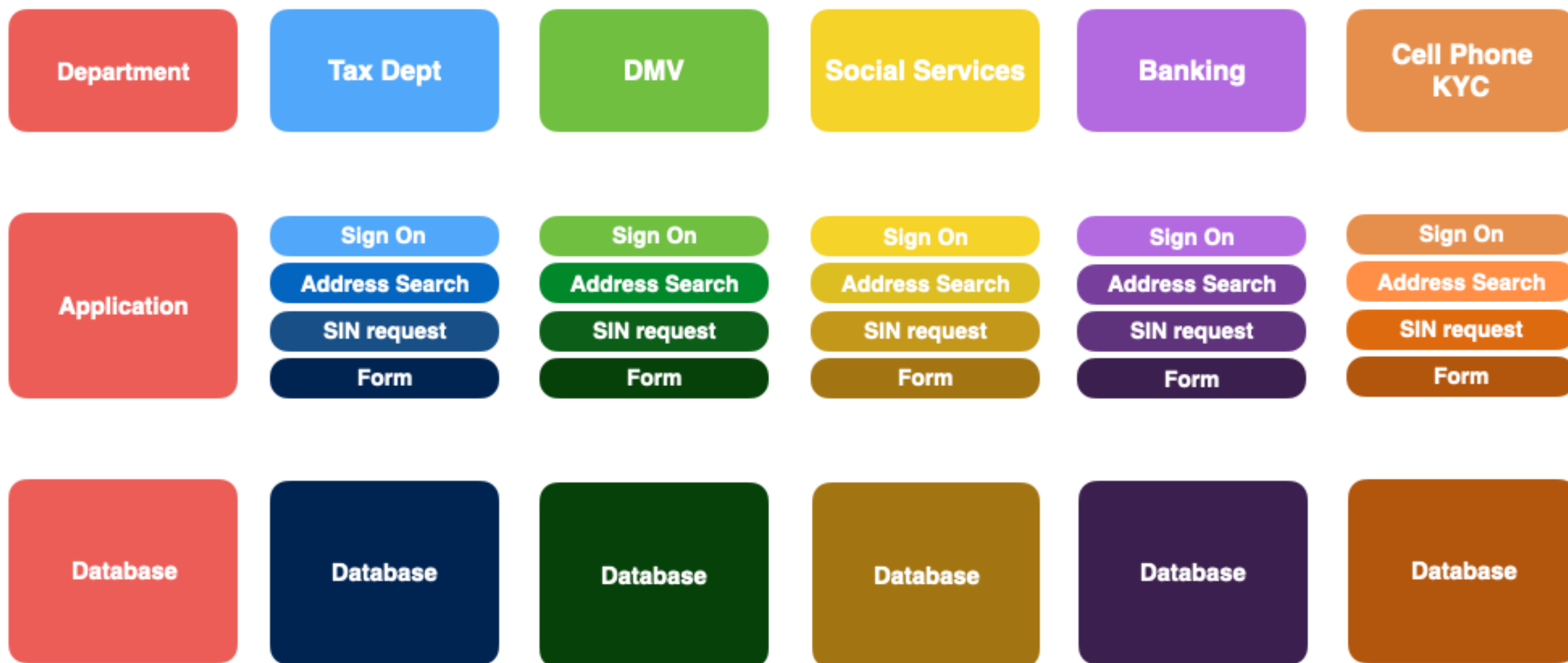
Government Sector

Private/Non-Profit Sector



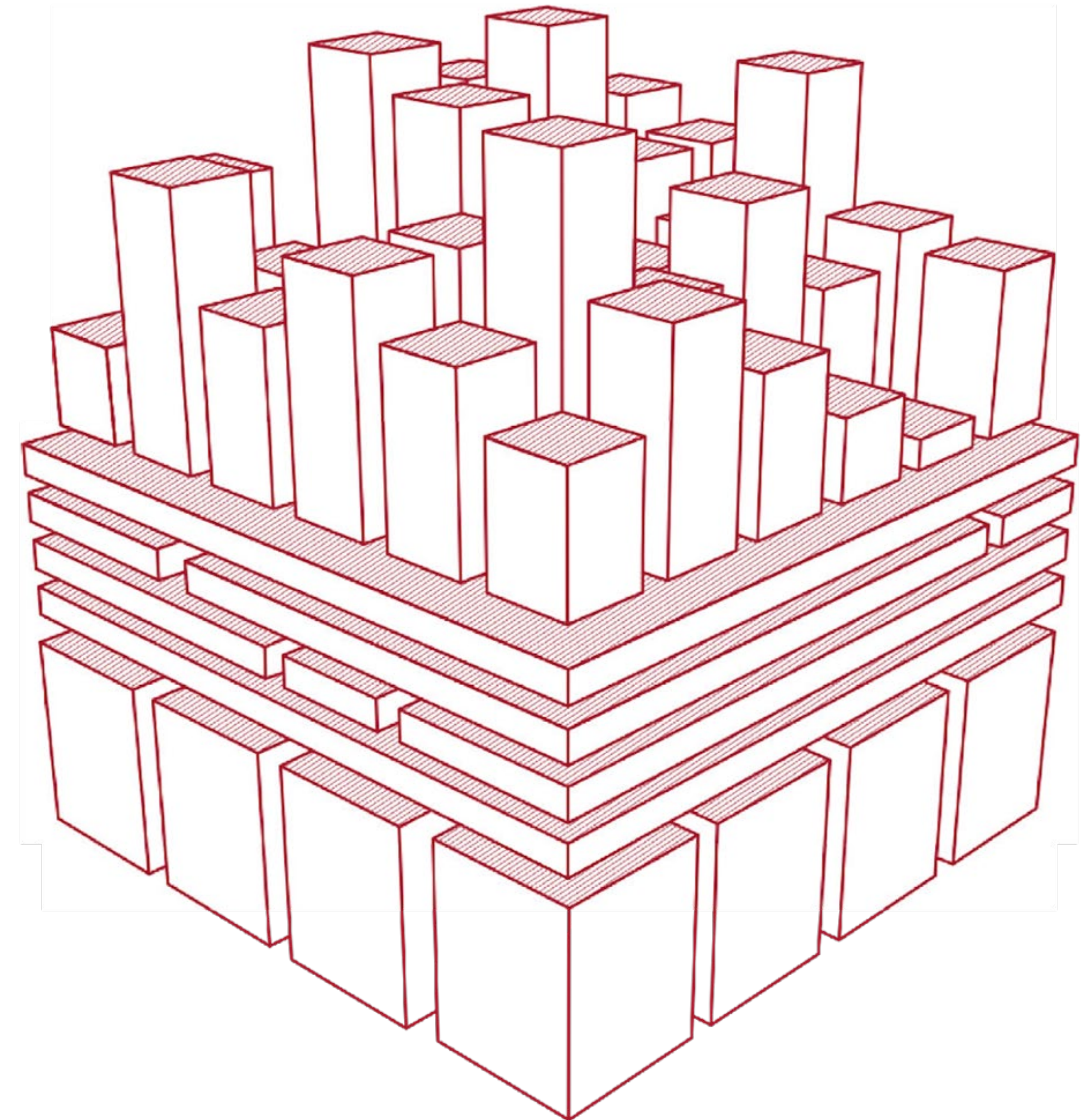
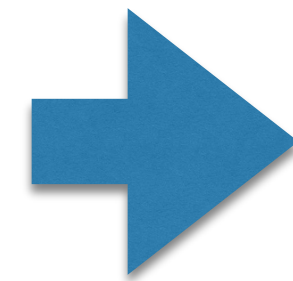
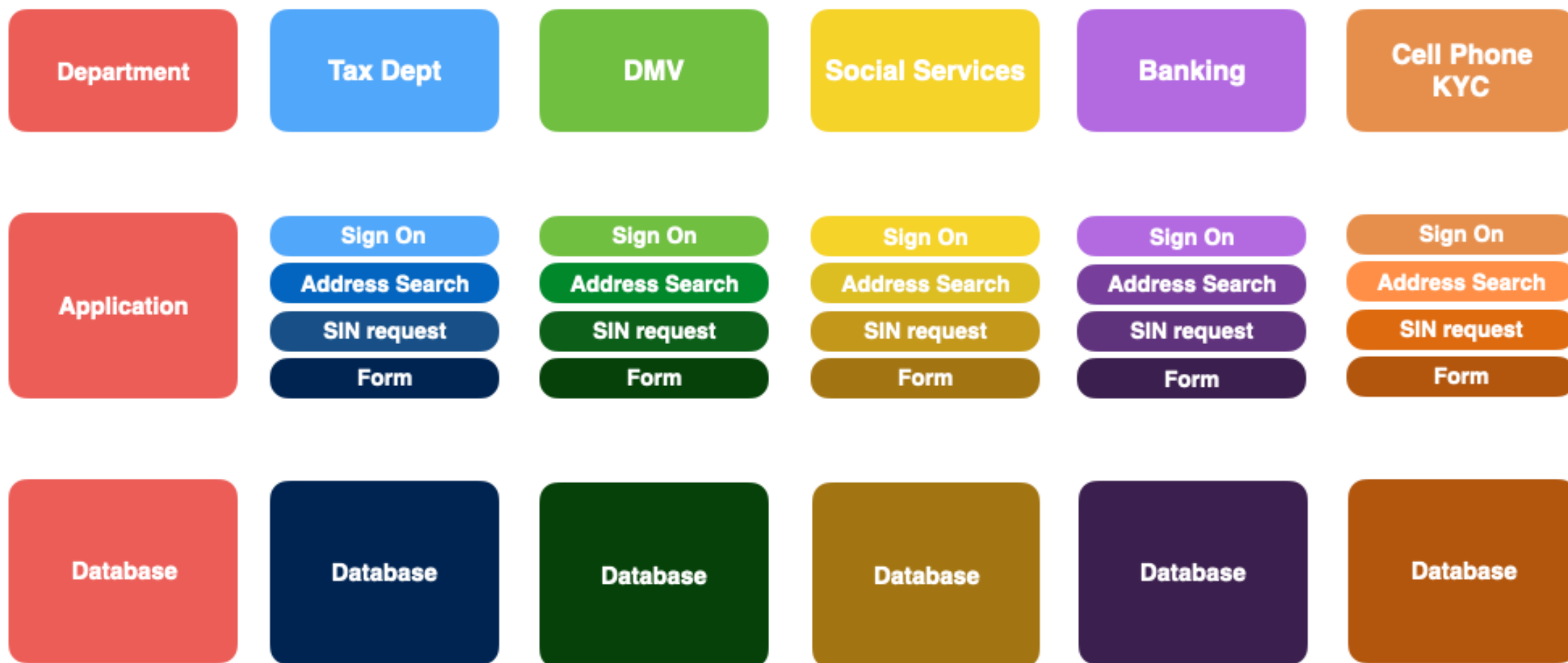
**What does an digital
public infrastructure view
of look like?**

Silo

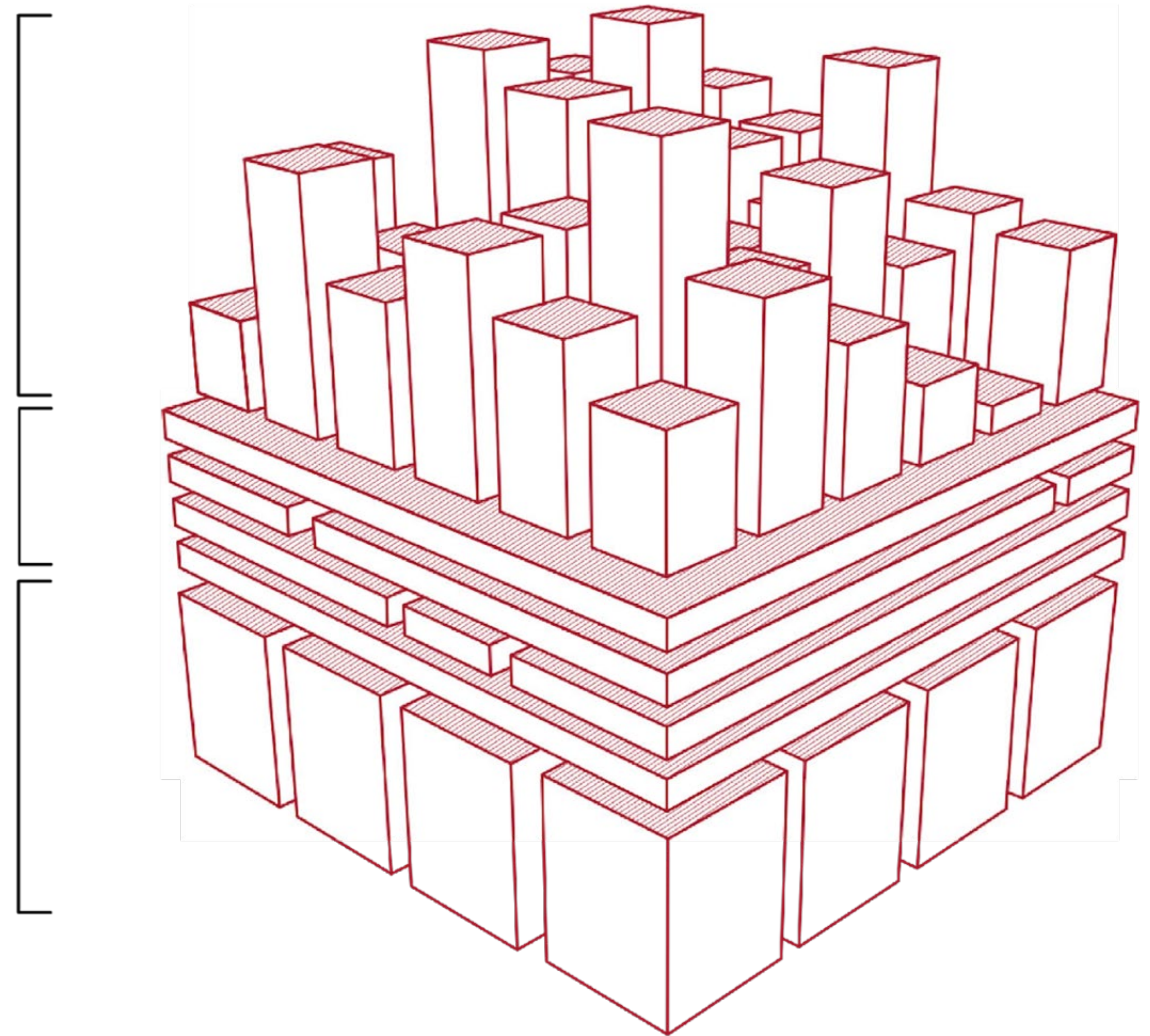


Silo

Stack

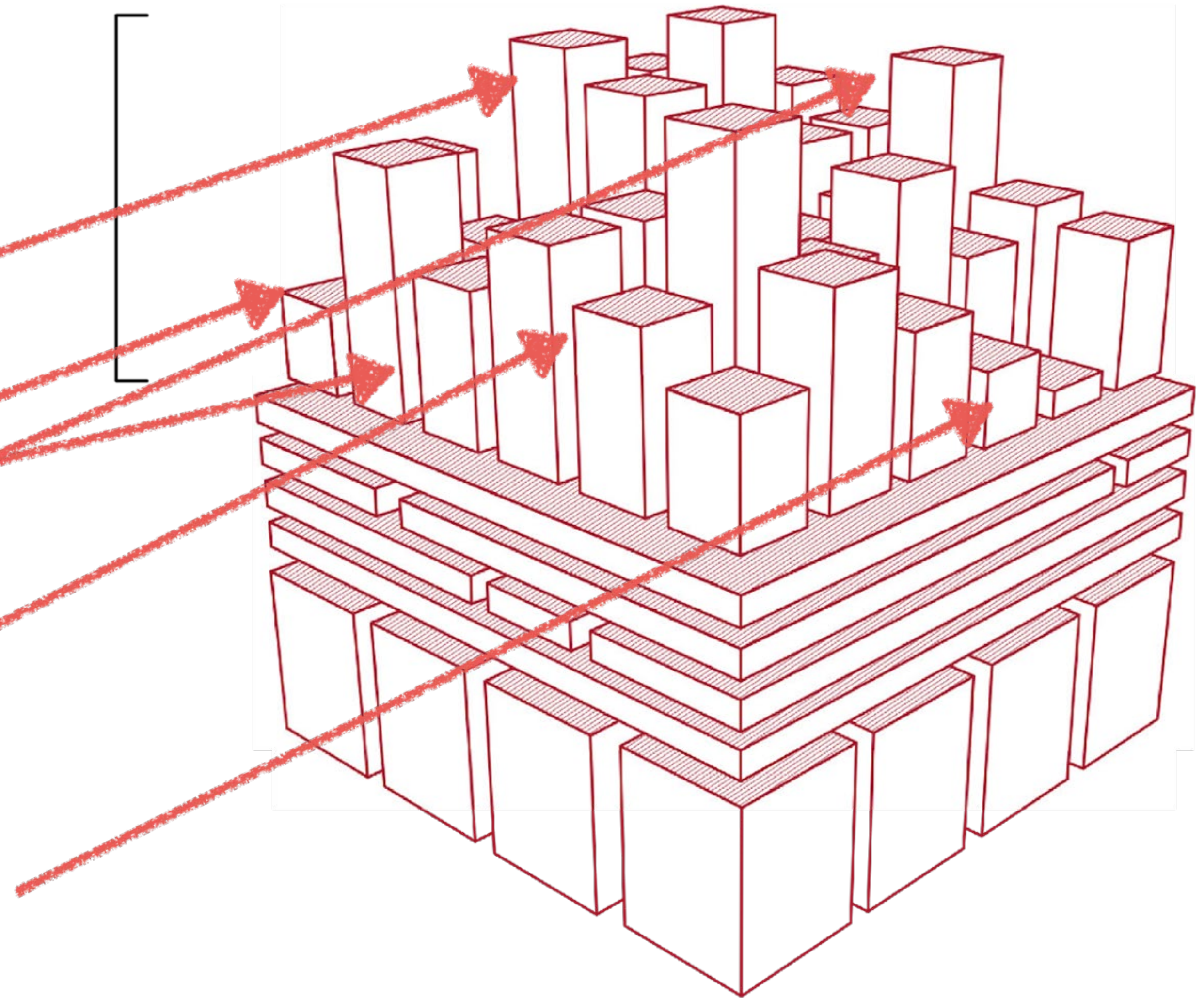


Services Shared infrastructure Data



Services

- Get a passport
- Get a Bank Account
- Find a Job
- Get a Phone
- Apply to University
- Apply for Employer Insurance



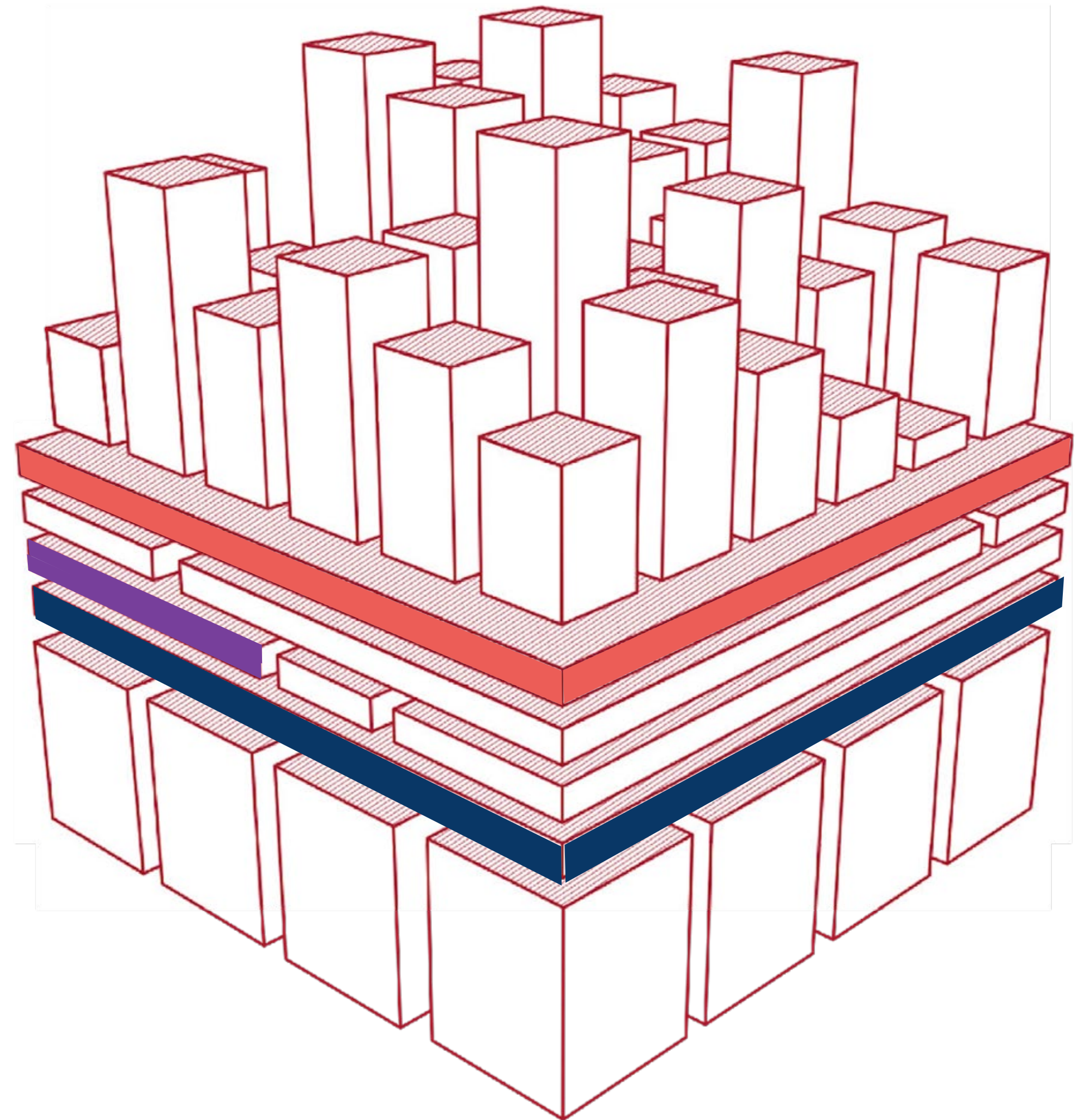
Authentication



Payments



Data Exchange



Notifications

GC Notify

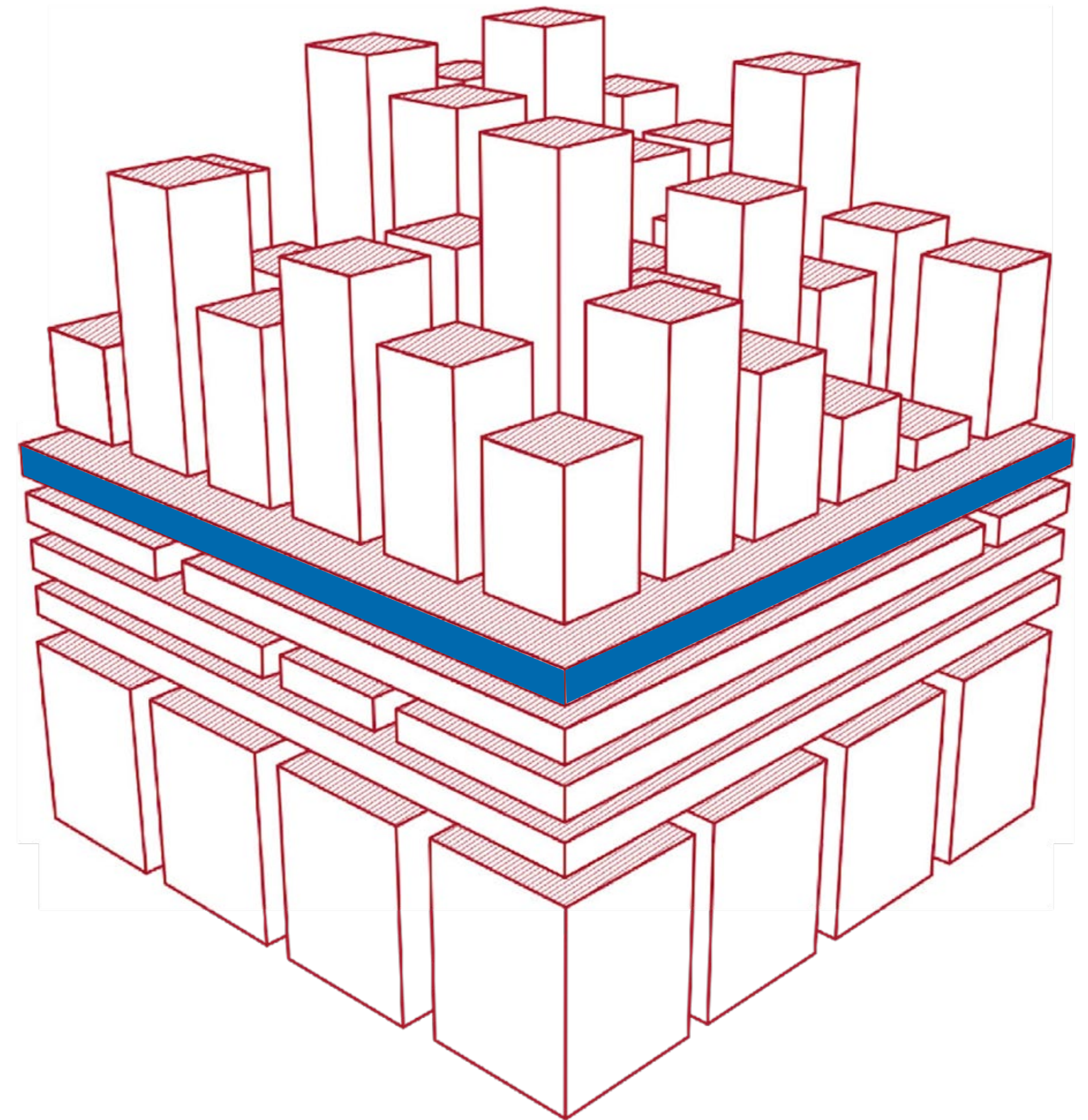


Forms



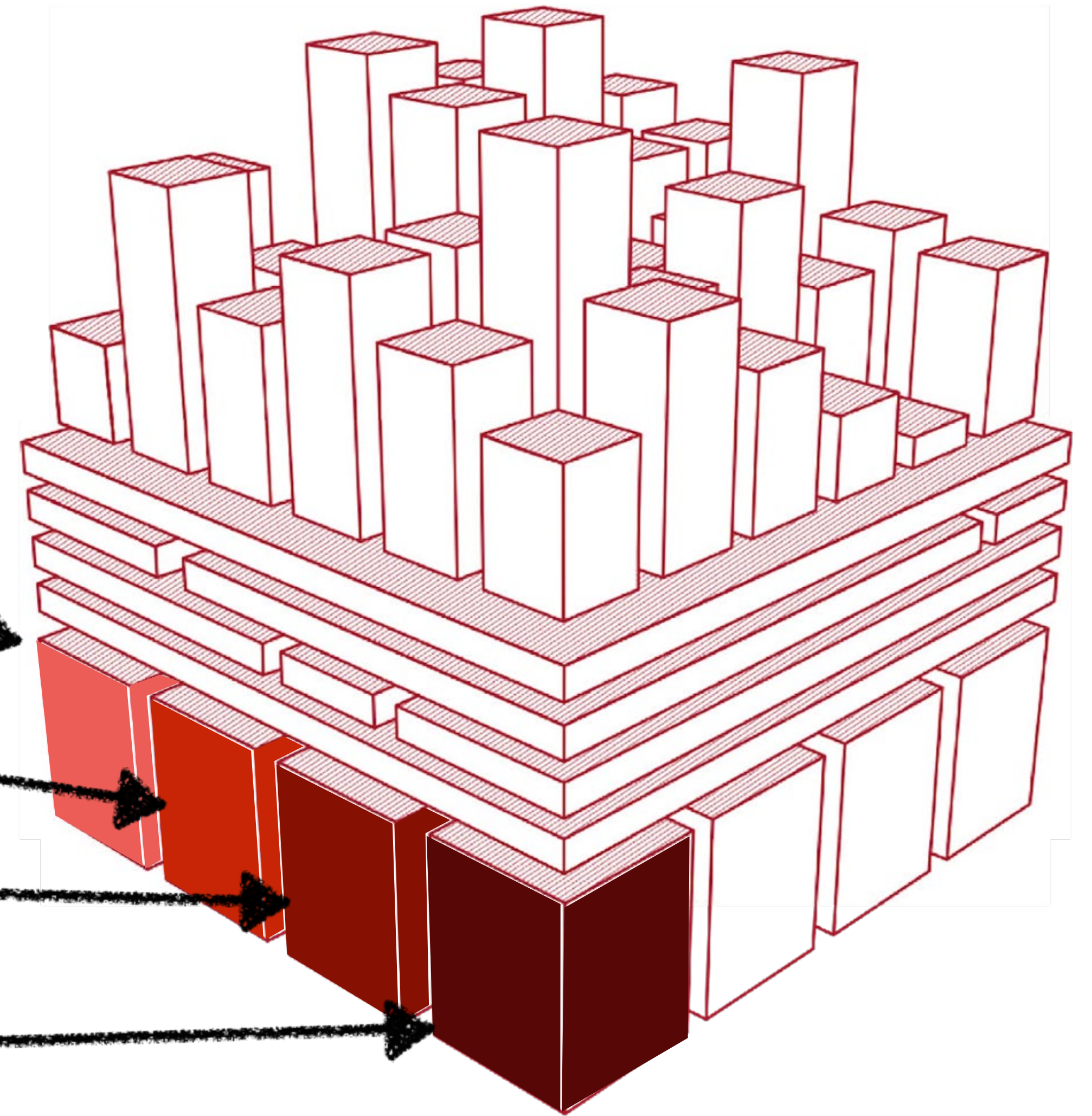
GC Forms

Scheduling



Data (Registries)

Unique Identifier
Vehicle Registry
GIS Data
Healthcare Records



Private provision vs Public utility

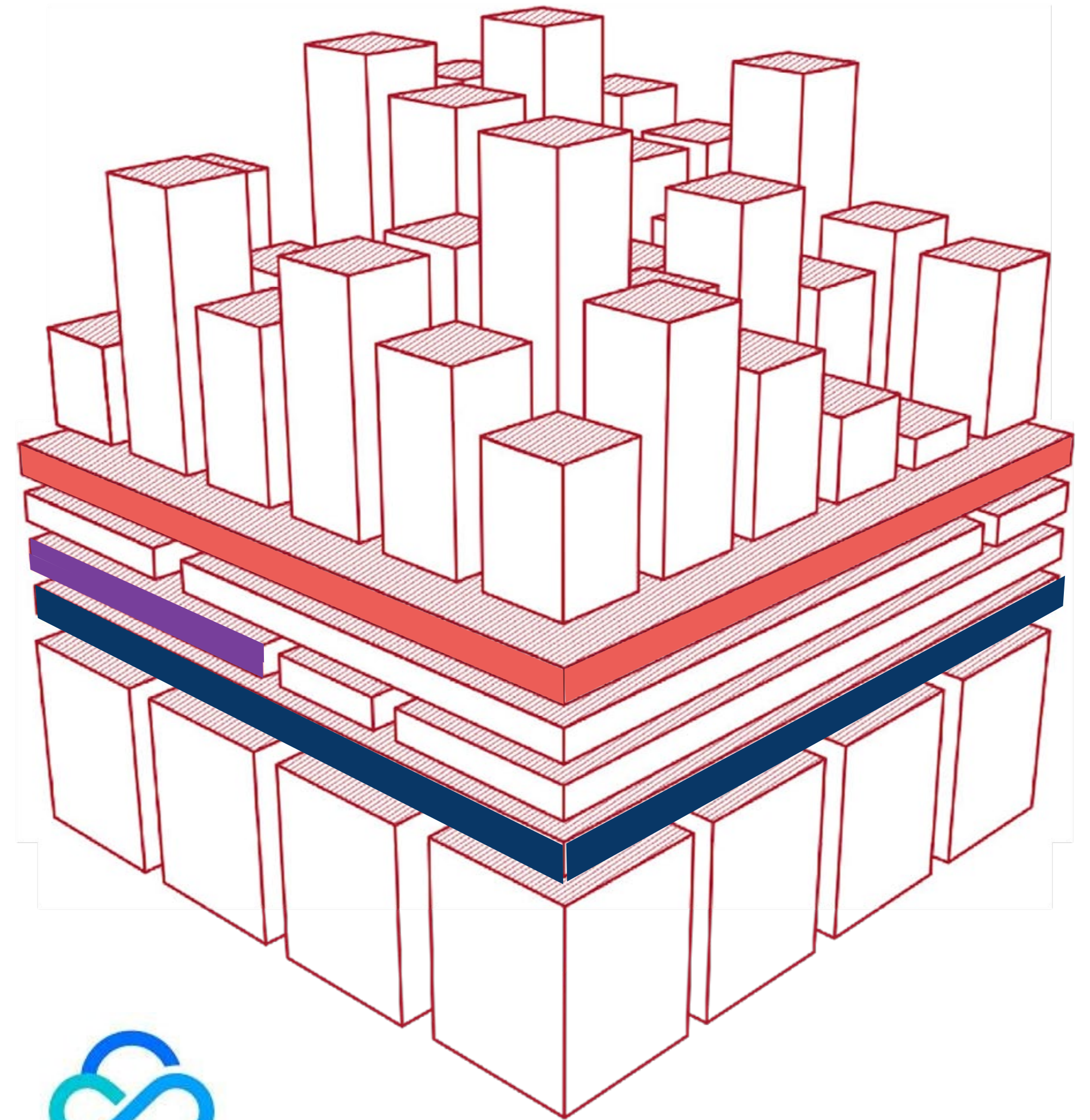
Authentication



Payments



Data Exchange



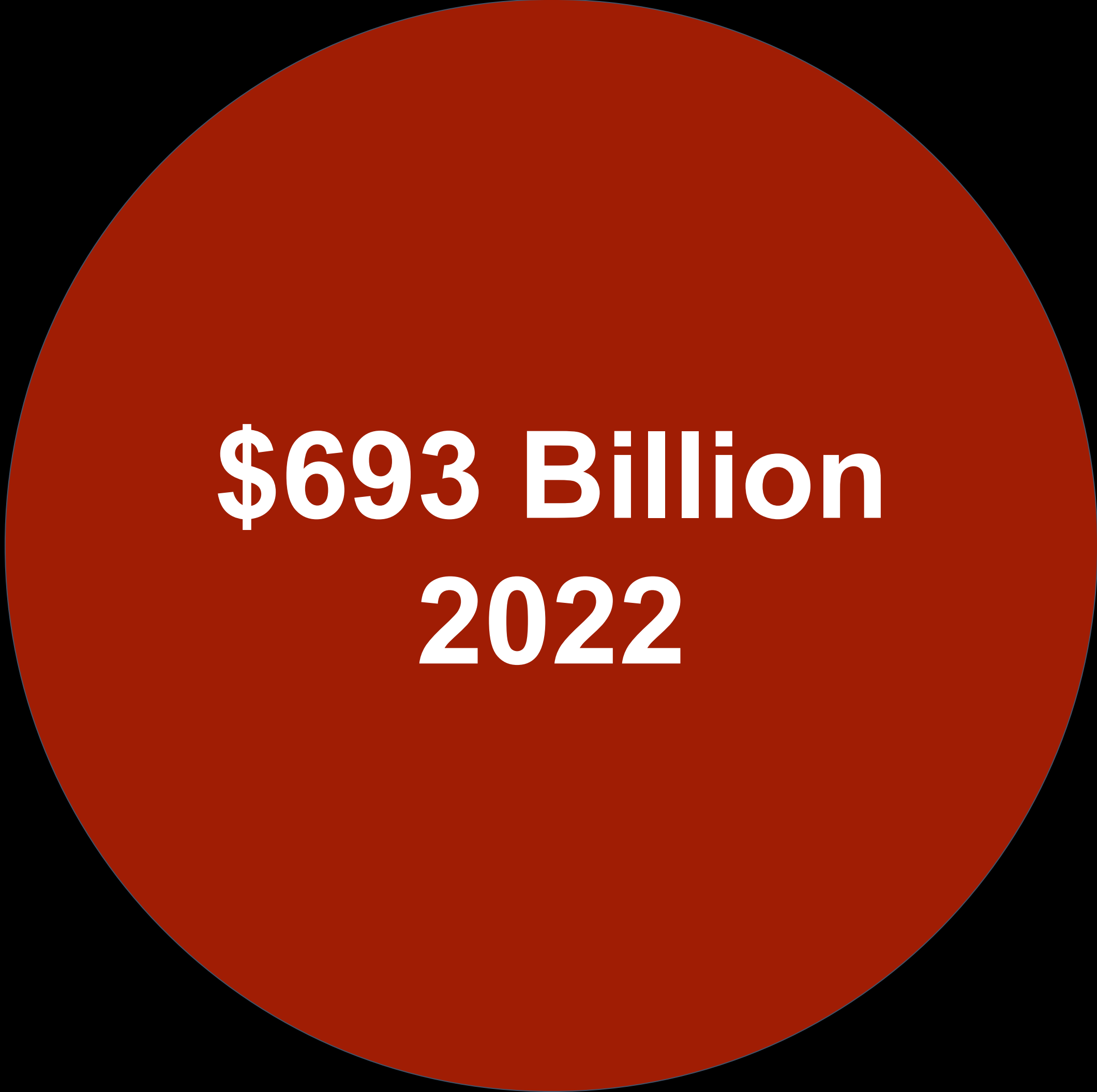
<2> Why DPI & Why Now

Reason 1: OECD Countries model doesn't always scale

Current models of funding models for government or advertising or credit don't scale.

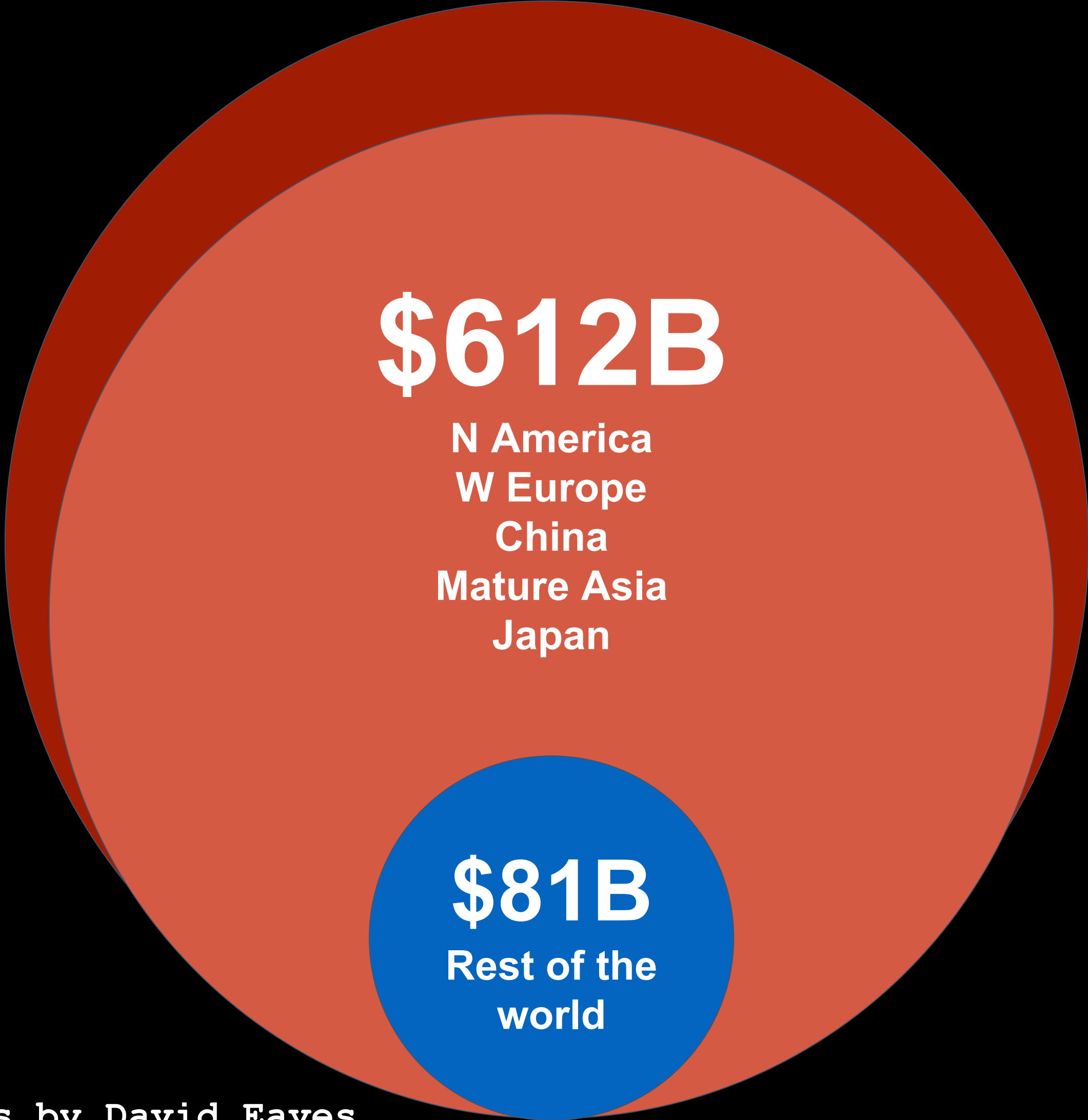
Take government:

Global Government IT Spend



\$693 Billion
2022

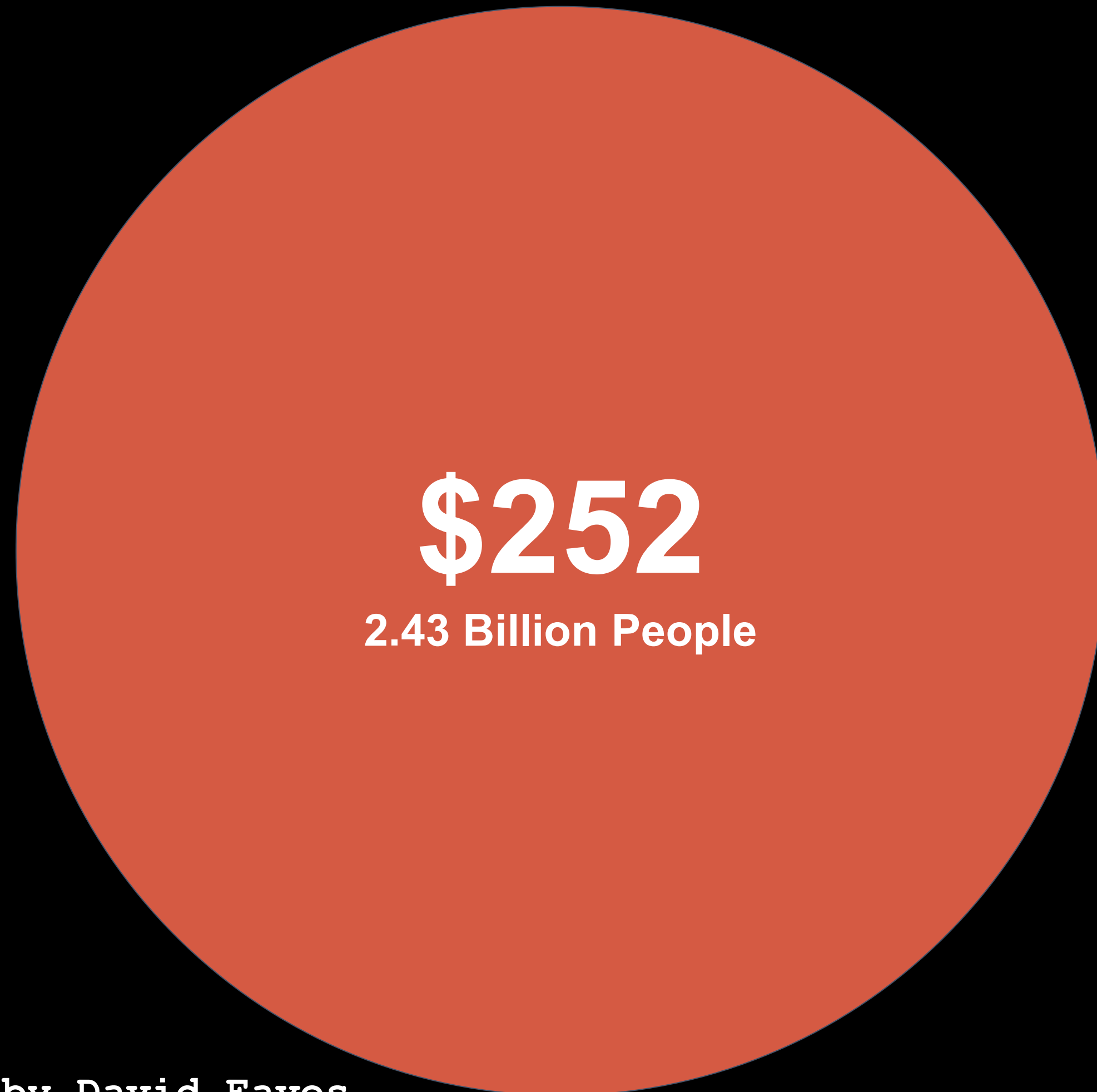
Global Government IT Spend (Total Dollars)



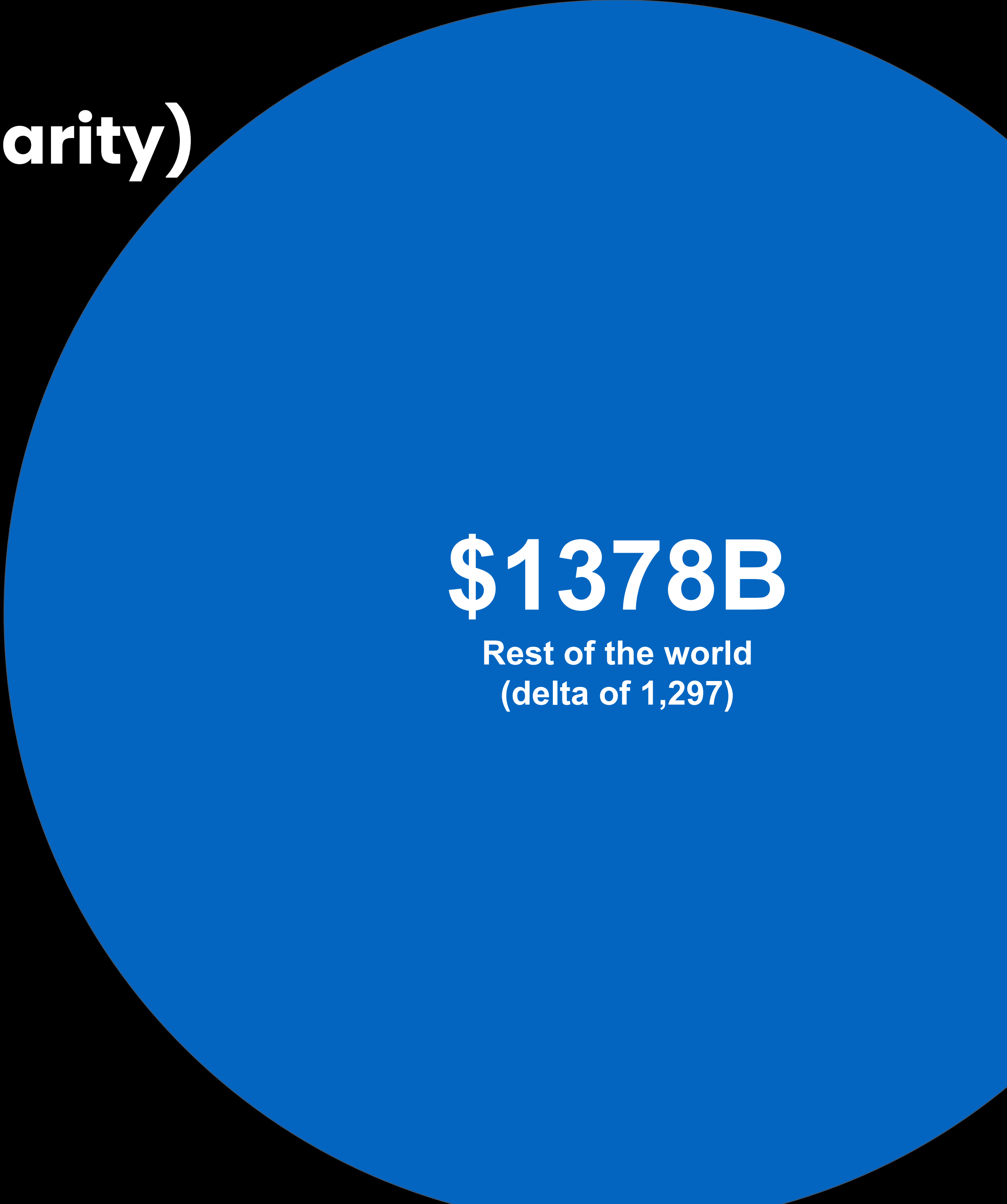
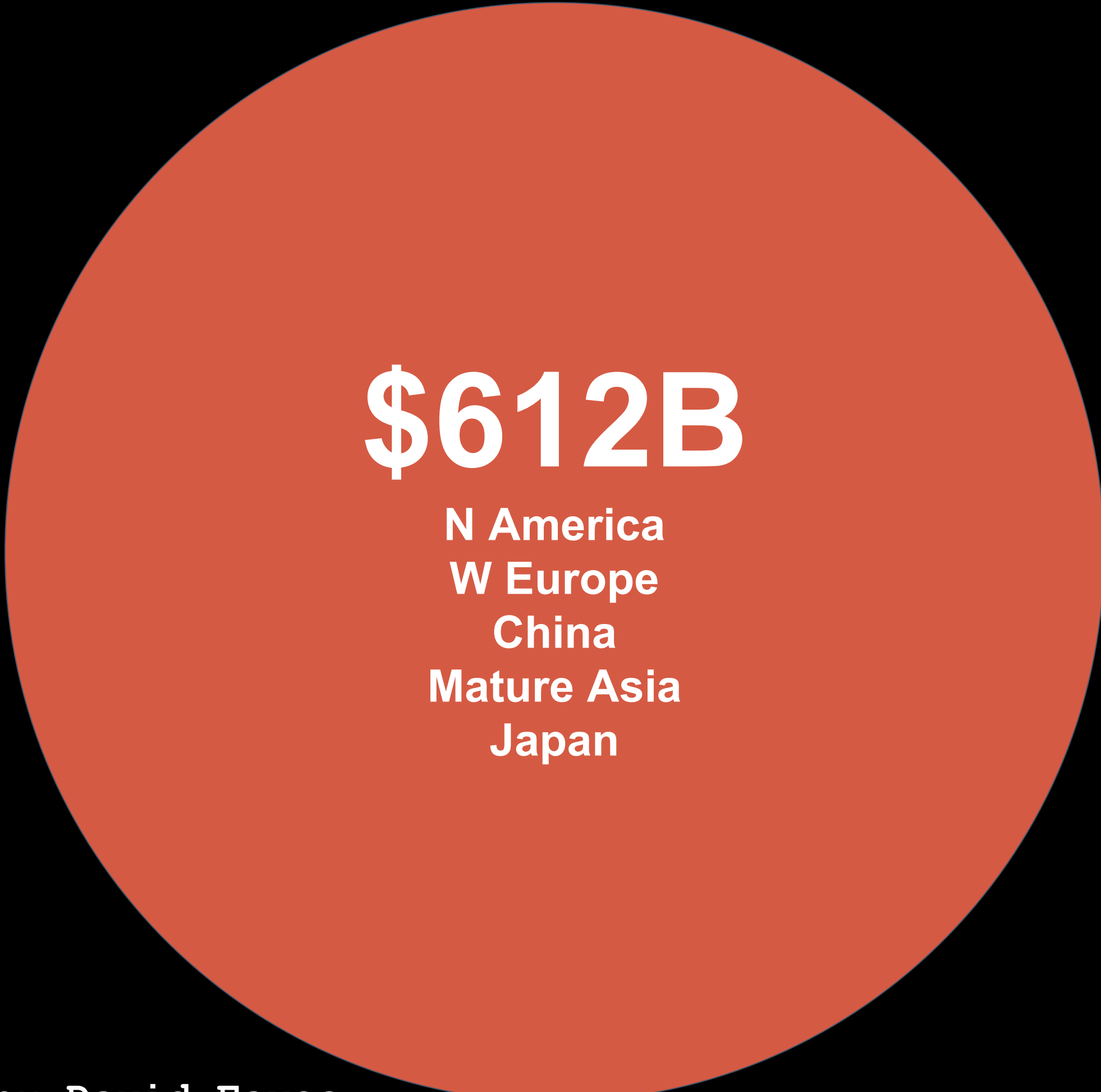
Global Government IT Spend (Total Dollars)



Global Government IT Spend (per capita)



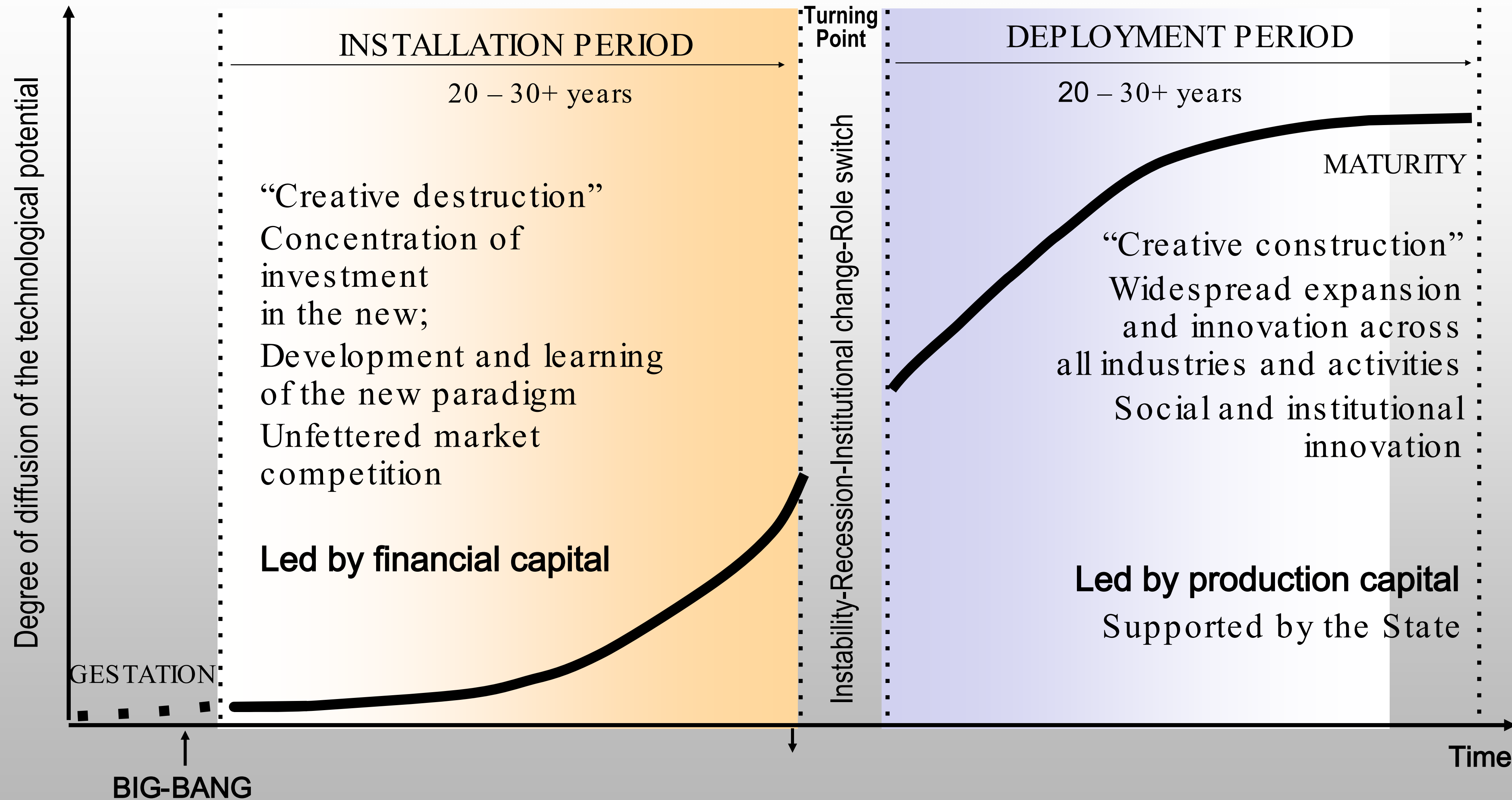
Global Government IT Spend (parity)



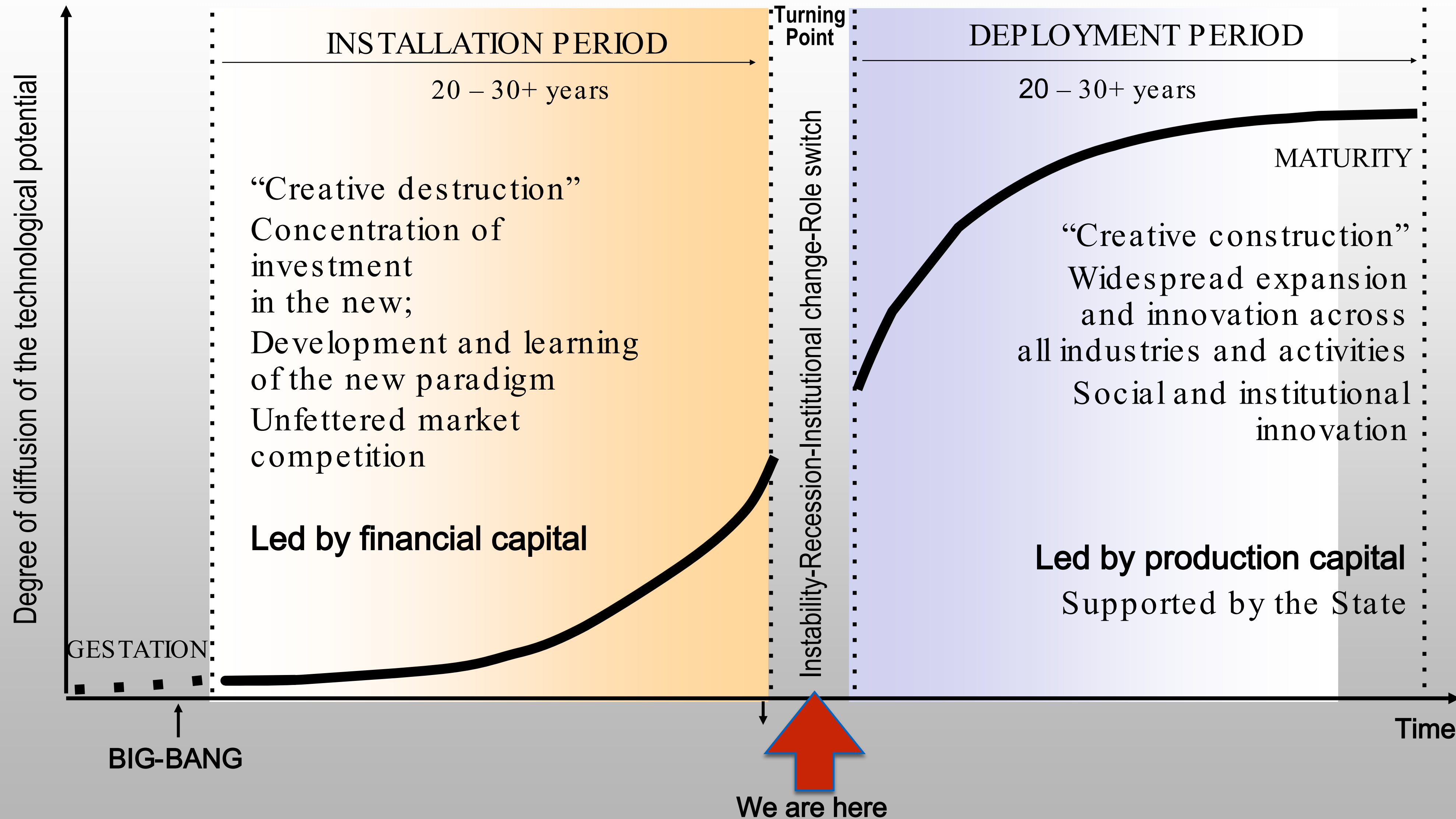
Reason 2:

DPI is part of a battle over finding an acceptable socio-economic governance for the digital economy

Each Technology Surge is Broken into two Different Periods



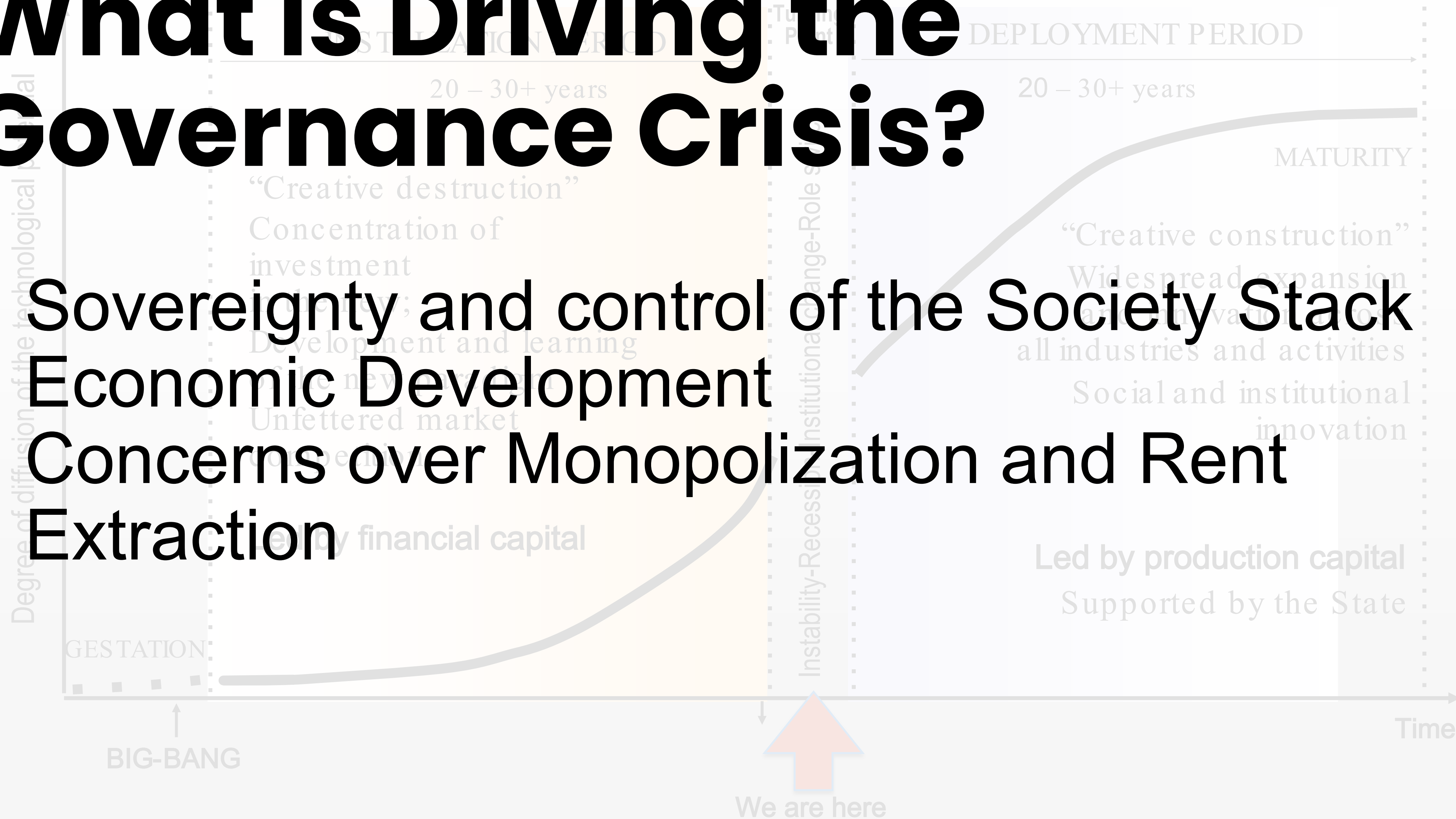
Each Technology Surge is Broken into two Different Periods

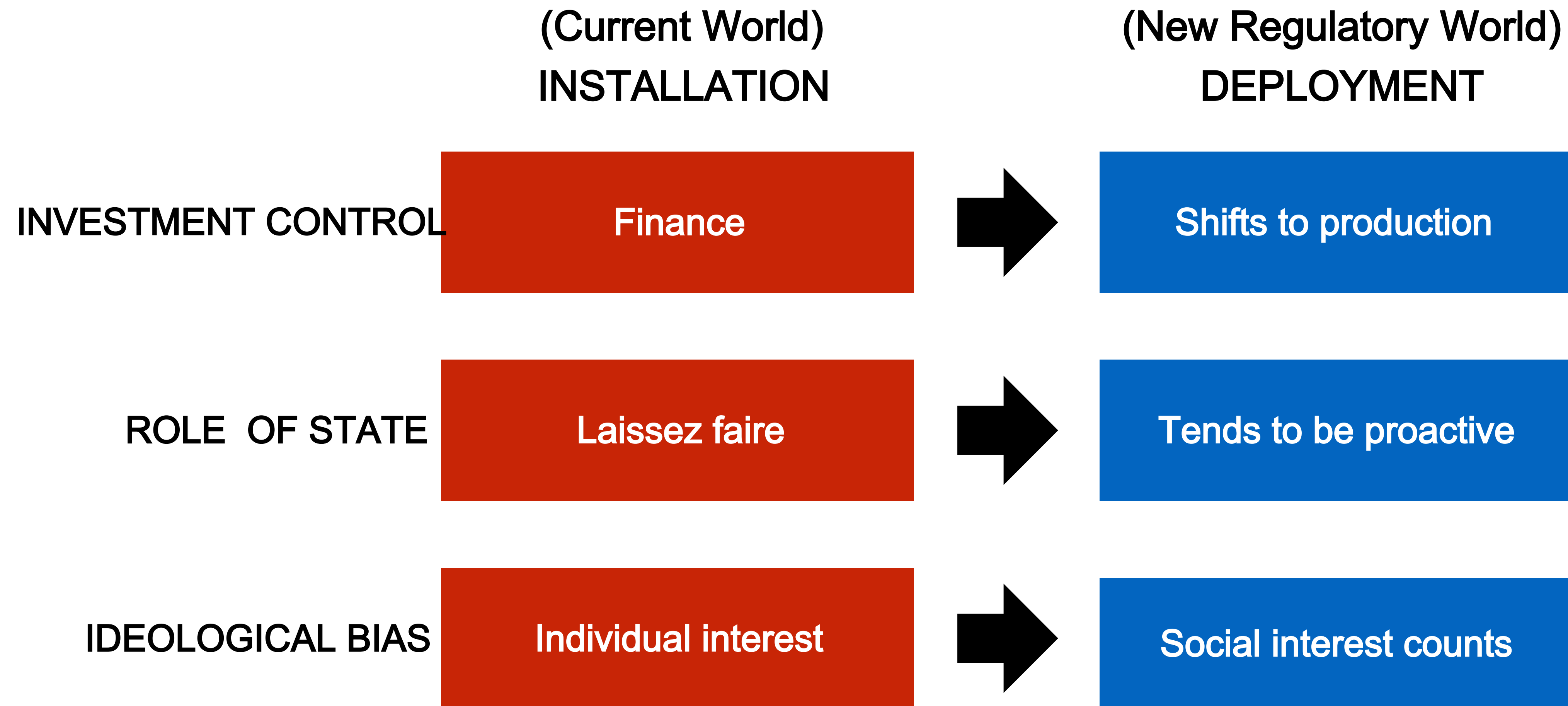


Each Technology Surge is Broken into two Different Periods

What is Driving the Governance Crisis?

- Sovereignty and control of the Society Stack
- Economic Development
- Concerns over Monopolization and Rent Extraction





Such a role switch implies a major shift in control
so the Turning Point is a time of political confrontations

This is the NOW

57 countries with
digital identity systems

93 countries with
digital payment systems

103 countries with
data exchange systems

While the story of digital public infrastructure has been a few years in the making, there is disproportionate information on fundamental questions on the topic – *Where is DPI? How does it look across different parts of the world?*

The DPI Map offers the first global investigation of deployments of digital identity, digital payment and data exchange systems.

[Explore insights](#)

[To the Map](#)

[Provide feedback](#)



DPI Map

Click on a country on the map to explore its digital identity / digital payment / data exchange system that acts as DPI.

You can also use the regional filter on the left to find a country. Clicking on the country in the list, and then the map, will show you more information.

Find the raw data on the DPI Map [here](#).

Explore the Map's methodology [here](#).

DPI Dashboard

Region
Africa
Asia
Caribbean
Europe
Latin America
Middle East

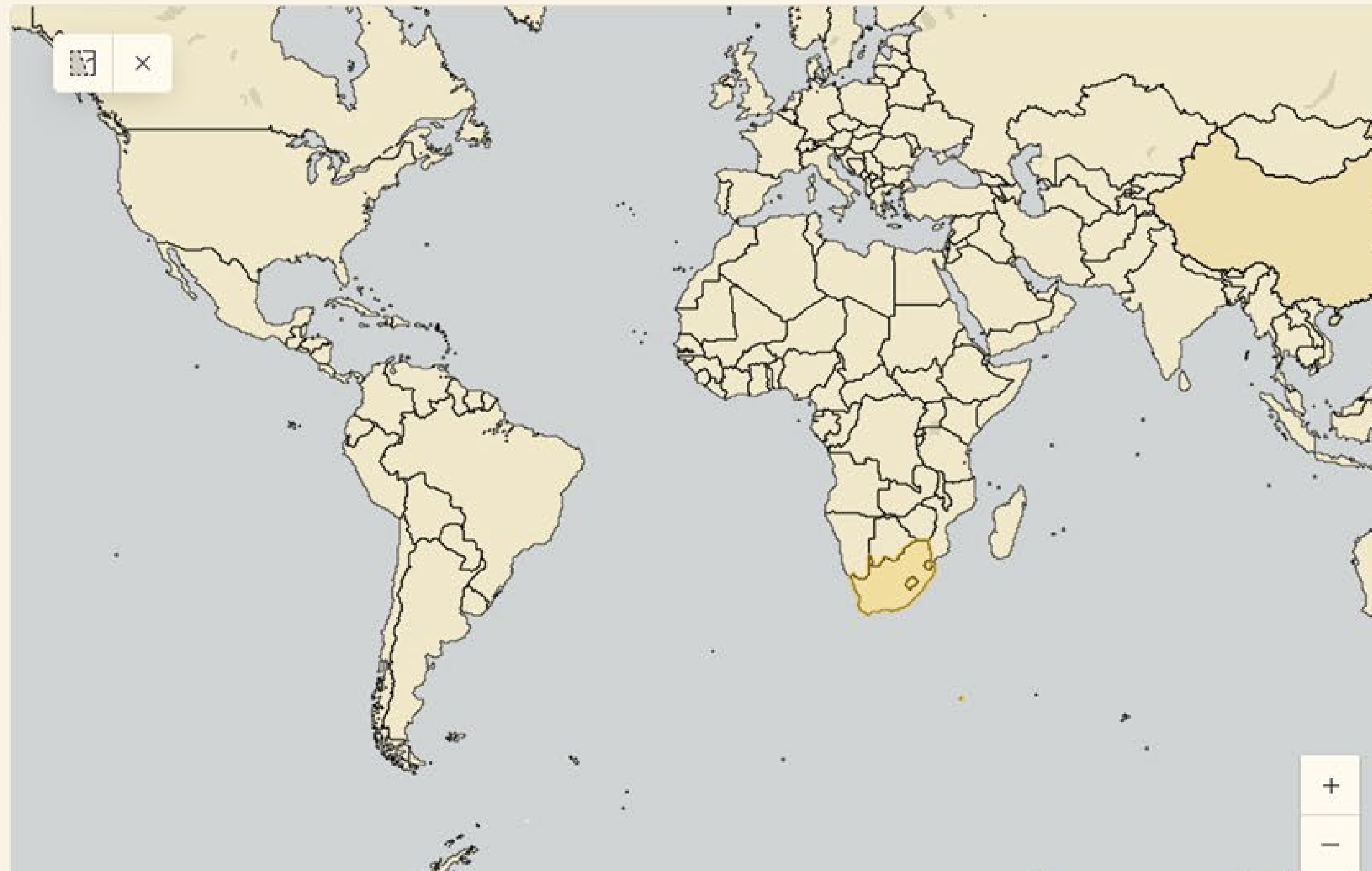
Country
Afghanistan
Albania
Algeria
American Samoa
Andorra
Angola
Anguilla
Antarctica

DPI Database
210
countries

Digital ID
57

Digital Payment
93

Data Exchange
103



South Africa



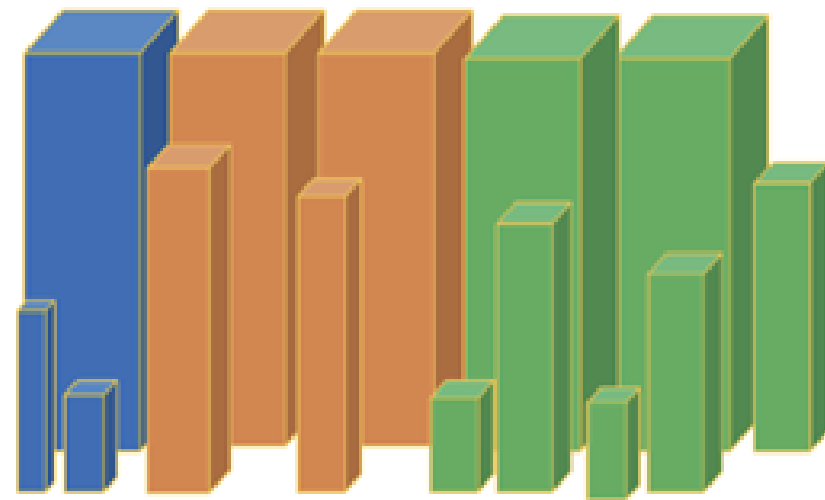
Digital ID

Digital ID name	Smart Identity Card (Smart ID)
URL	Unknown
Status of implementation	Plan
Claim of digital (or electronic) ID	Yes
ID/ Civil Register Act	Yes
Digital authentication function	Yes
Governor entity	
Institutional	Security and

Provide feedback

<3> DPI & Ministries of Finance?

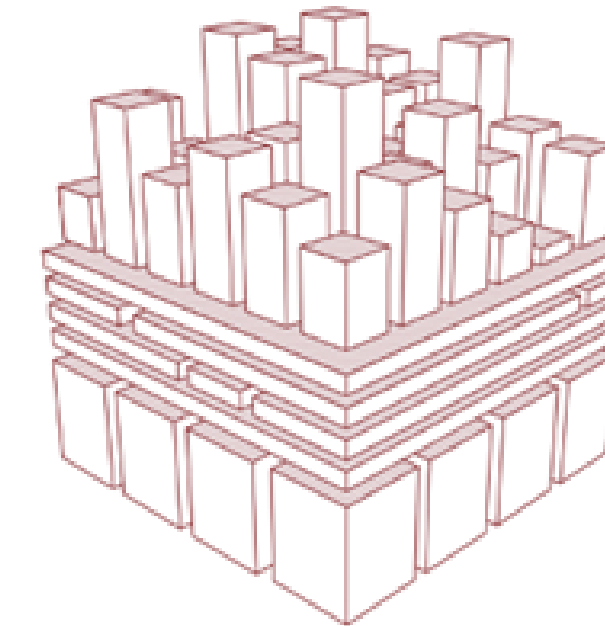
Traditional digitization



- Vertical interoperability
- Modernization and efficiency in each department
- State as a problem solver
- Driver: operational efficiency and public services



Sovereign Stack



- Vertical and horizontal interoperability (DPI-enabled)
- Ecosystem of actors, spillover and market-shaping effects
- State as a problem solver and enabler of a wider ecosystem
- Driver: inclusive economic development, fiscal constraints, reducing rent extraction and sovereignty

The DPI's economic properties are associated with potential for amplified economic value

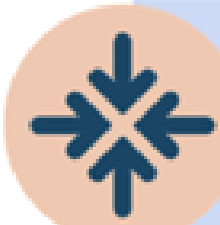
Three Economic Properties of DPI

- 1** **standardization** can reduce transaction costs, generating efficiencies and helping with information asymmetries.
- 2** **interoperability** beyond immediate applications can generate spillovers;
- 3** **high potential for reuse** due to a relatively low marginal cost can enable combinatorial innovation, shaping markets.

Types of effects

Examples of effects

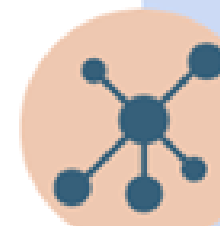
Direct



Static efficiency and consumption

- Fiscal impacts (savings, tax collection, leakage, etc)
- Human intermediaries
- Administrative burden

Dynamic



Spillovers and externalities

- Nonlinear fiscal impacts associated with interoperability
- Nonlinear savings from building new solutions
- Potential effects on formalization, corruption levels, etc

Market-Shaping

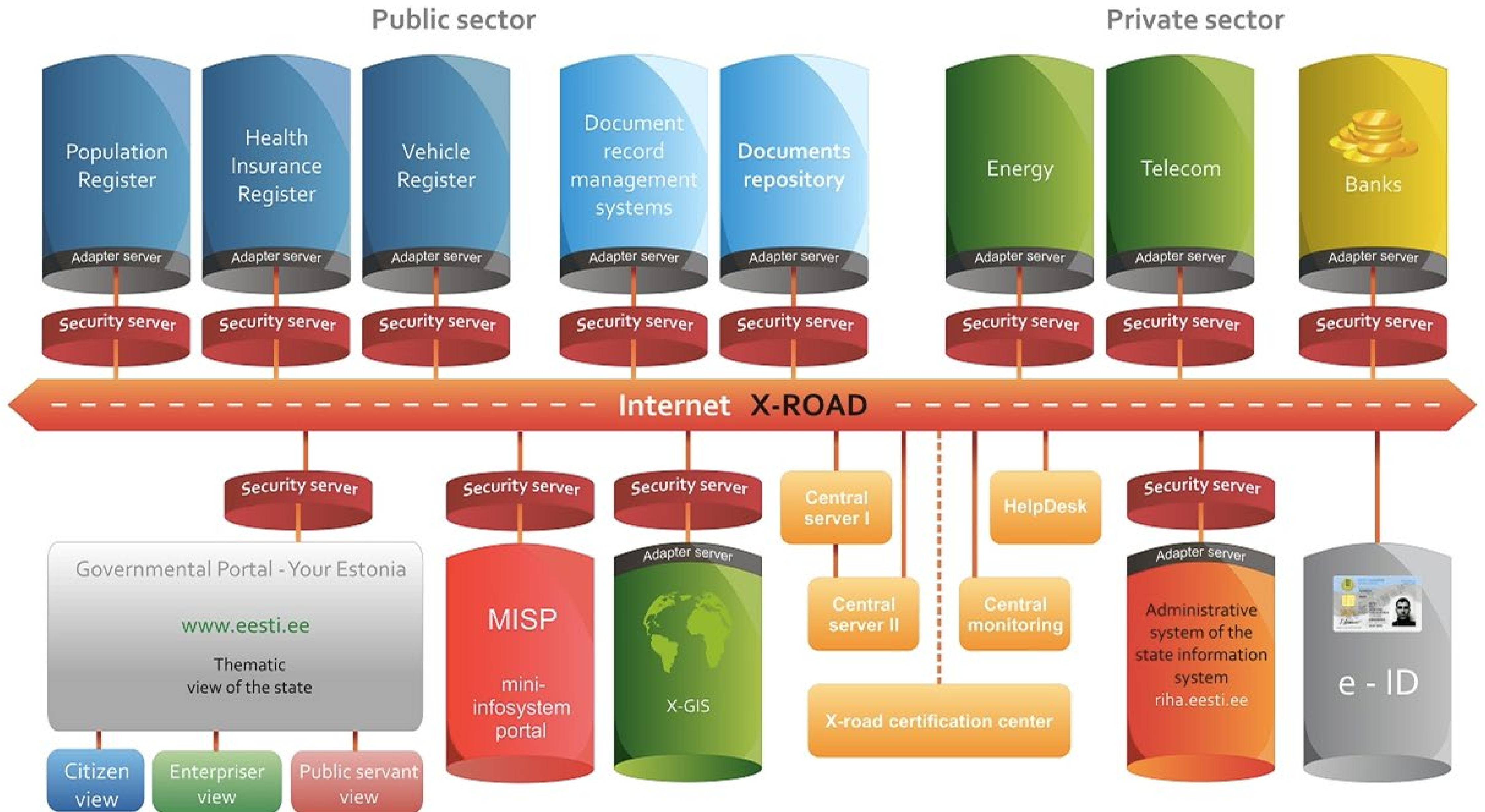


Ecosystem-wide transformative effects

- Effects on competition
- Effects on market creation/ dismantling
- Changes in capacity to respond to crises

Efficiency

X-road



SERVICE MOU

DATA MOU

DATA MOU

DATA MOU

SERVICE MOU

SERVICE MOU

SERVICE MOU

SERVICE MOU

SERVICE MOU

DATA MOU

DATA MOU

DATA M

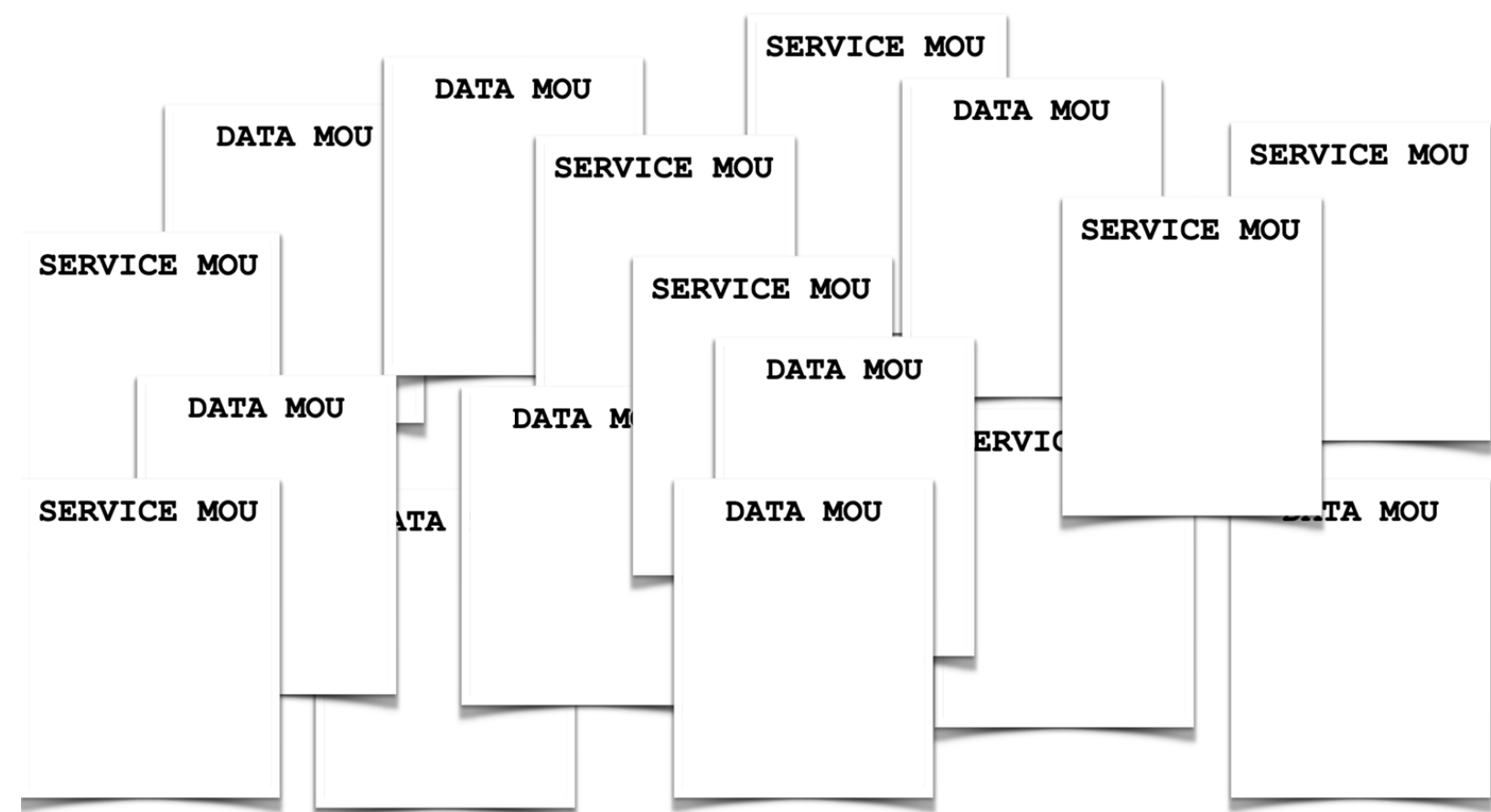
ERVIC

DATA MOU

DATA MOU

SERVICE MOU

ATA



VS



Ministries of Finance value:

Ministries of Finance value:

- Frugality

Ministries of Finance value:

- Frugality
- Reuse & Standardisation

Ministries of Finance value:

- Frugality
- Reuse & Standardisation
- Efficiency

Ministries of Finance value:

- Frugality
- Reuse & Standardisation
- Efficiency
- Scale & Interoperability

Ministries of Finance value:

- Frugality
- Reuse & Standardisation
- Efficiency
- Scale & Interoperability
- Accountability

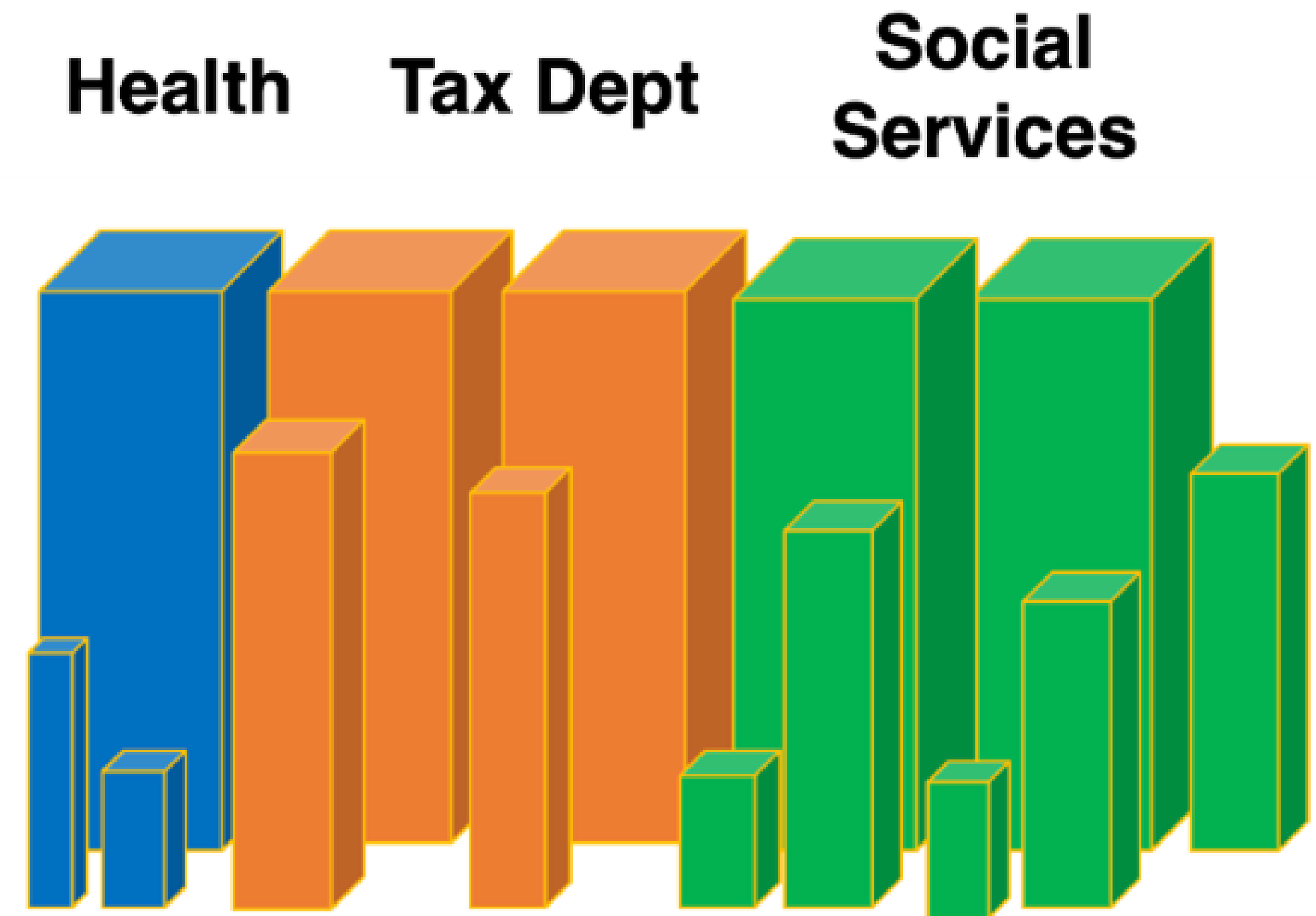
Ministries of Finance value:

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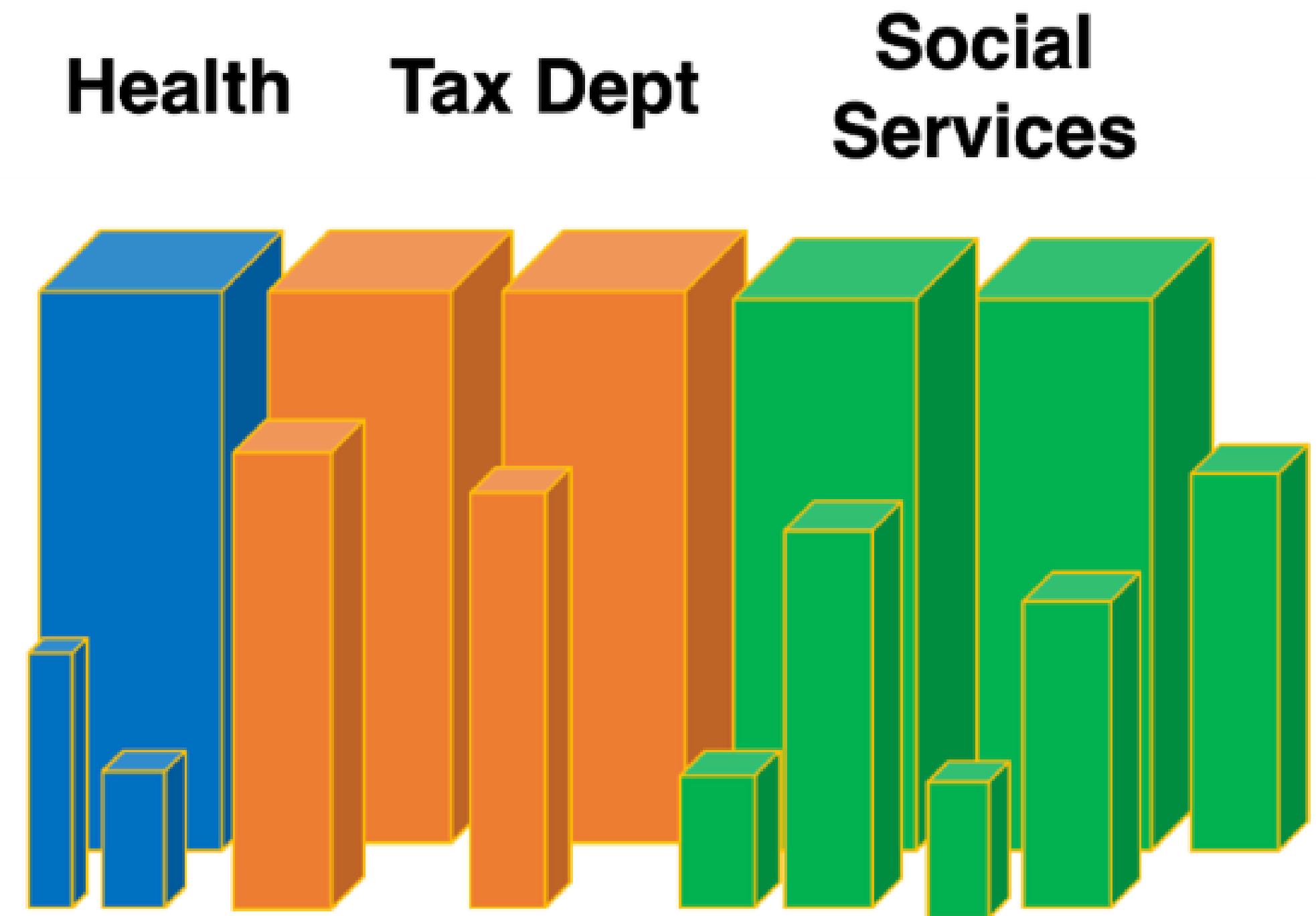
Ministries of Finance
shape the size and structure
of government.

And this efficiency and scale
of government.

Why are they (keep) funding monoliths?



Why are they (keep) funding monoliths?



Come help us figure out later today.

Our Team



David Eaves



Diane Coyle



Sumedha Deshmukh

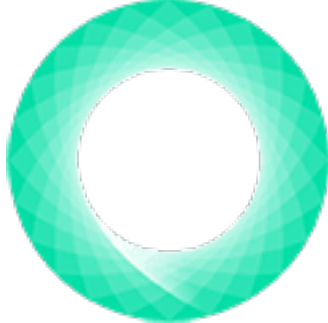


Beatriz Vasconcellos



Navneet Kumar

BILL & MELINDA
GATES *foundation*



**Bennett Institute
for Public Policy**
Cambridge



In Summary

There isn't enough Money

DPI capabilities are emergent

Emerging costs and benefits

Ministries of Finance are Blockers

Institute for
Innovation and
Public Purpose



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