capillar.it

consumption-centric mobility solutions

july 9th Physical Internet Award | IPIC 2019 London

Javi Esquillor

contributions w/i Physical Internet
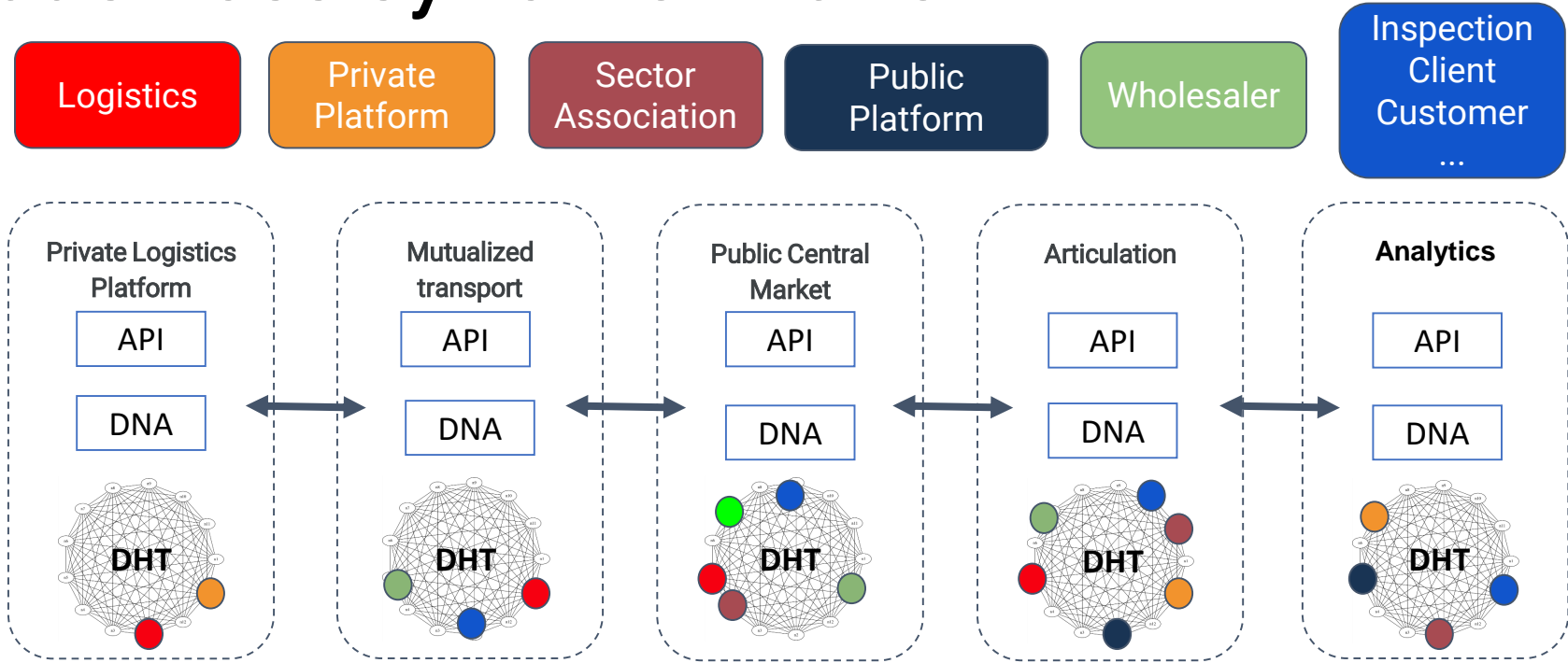
this we bring

→ physical^2 internet business

→ GS1 penetration turnaround project

→ capillary logistics networks

→ City Line, ENTRUST

business synchronization

Logistics	Private Platform	Sector Association	Public Platform	Wholesaler	Inspection Client Customer ...

Private Logistics Platform

API

DNA

DHT

Mutualized transport

API

DNA

DHT

Public Central Market

API

DNA

DHT

Articulation

API

DNA

DHT

Analytics

API

DNA

DHT

bridging allows agents to share data at APP layer

conventional market | new sale channels
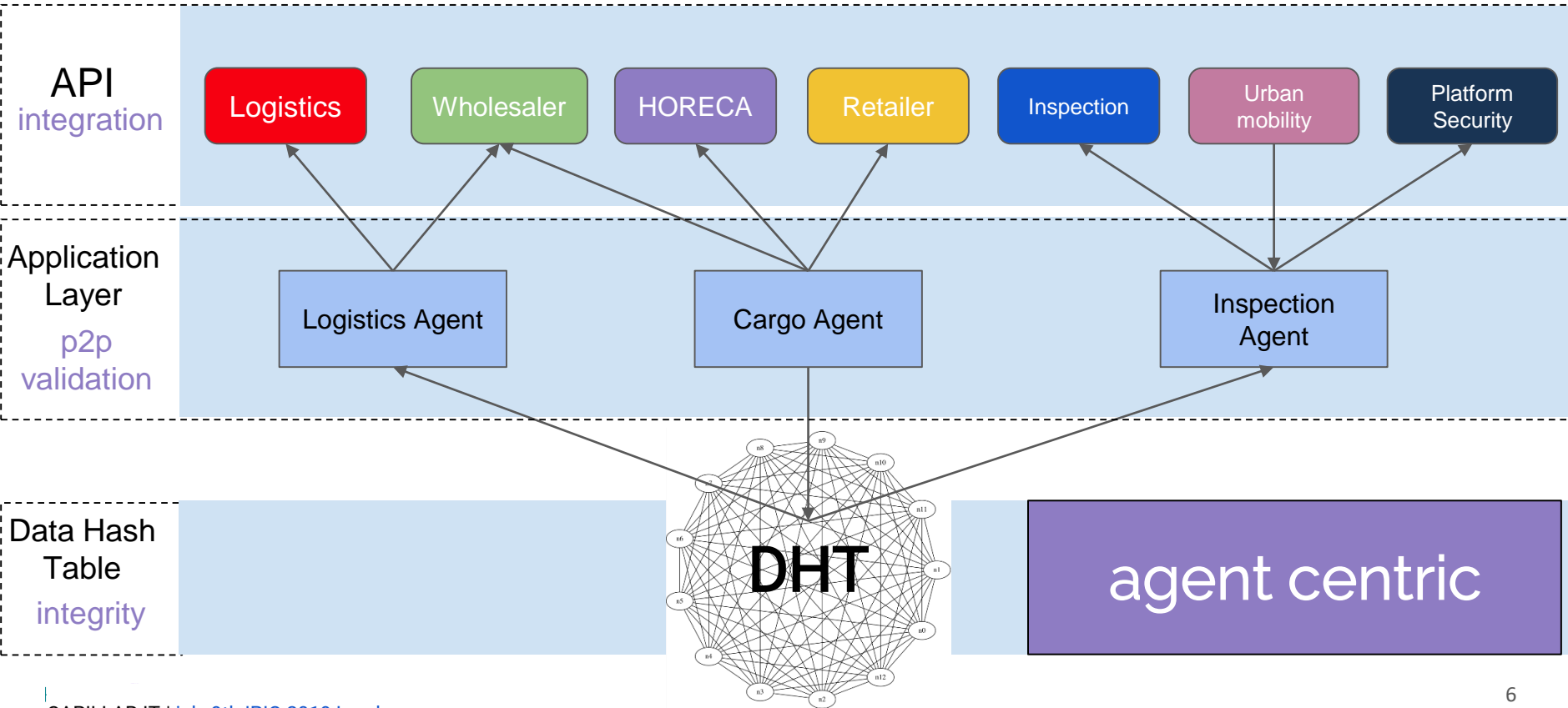
+ full traceability

through mutualized tools

+ fully owned by themselves p2p

stepping business into digital economy

+ data | hosting | cryptocurrency

hApp 1 | mutualized urban distribution

API integration

Application Layer p2p validation

Data Hash Table integrity

Logistics | Wholesaler | HORECA | Retailer | Inspection | Urban mobility | Platform Security

Logistics Agent | Cargo Agent | Inspection Agent

DHT

agent centric

this is today

this is today

secondary processor → distributor / wholesaler → retailer / point-of-sale → consumer

distributor / wholesaler → restaurant / point-of-service → consumer

Downstream

this is today

→ **2nd largest mkt worldwide | 1st diverse portfolio**
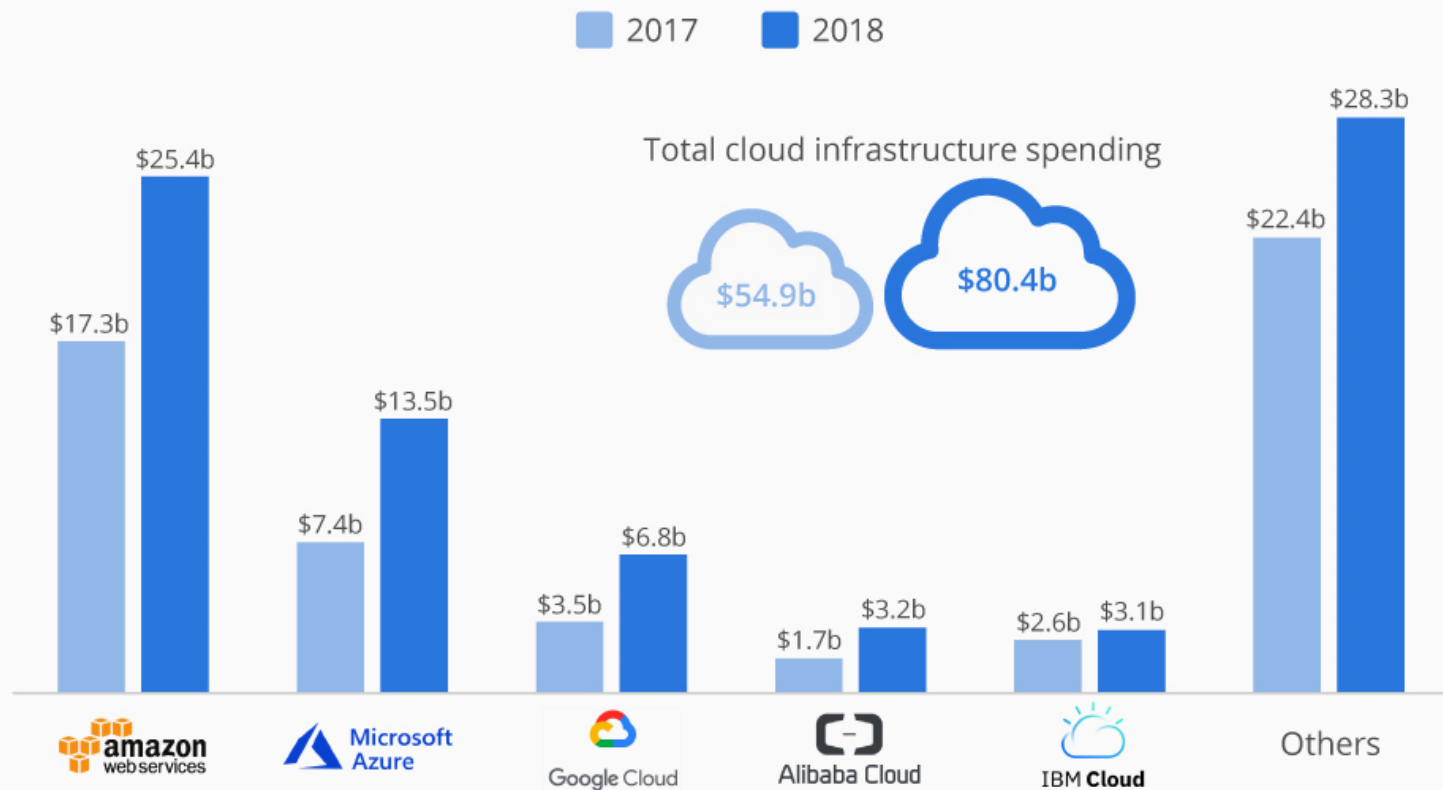
→ **100.000 tn / year urban distribution**

whilst

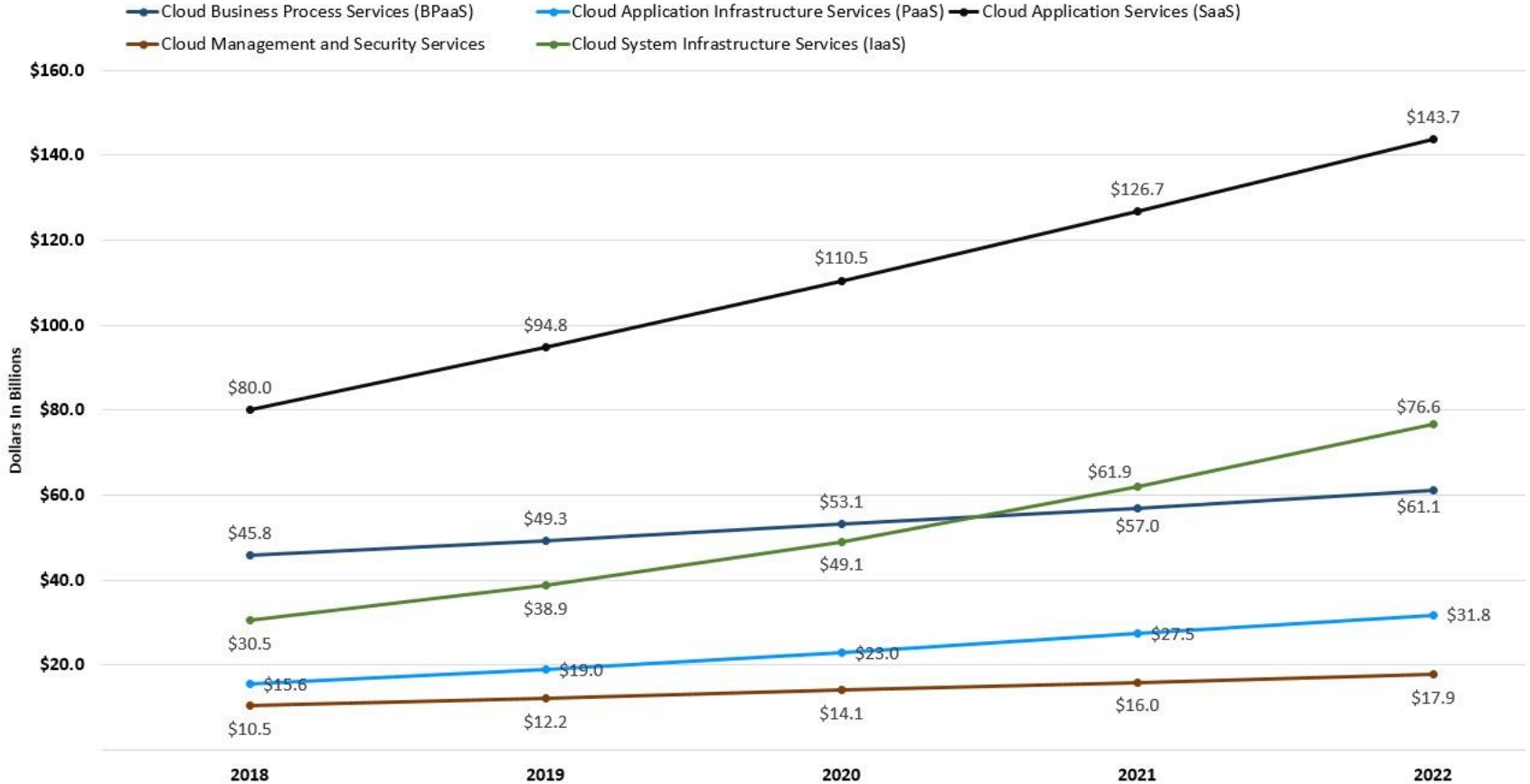## Cloud computing business at 5% of its potential

Amazon Captures 32% of $80 Billion Cloud Market

Worldwide cloud infrastructure spending, by provider

■ 2017   ■ 2018

Total cloud infrastructure spending

$54.9b $80.4b

amazon web services: $17.3b (2017), $25.4b (2018)

Microsoft Azure: $7.4b (2017), $13.5b (2018)

Google Cloud: $3.5b (2017), $6.8b (2018)

Alibaba Cloud: $1.7b (2017), $3.2b (2018)

IBM Cloud: $2.6b (2017), $3.1b (2018)

Others: $22.4b (2017), $28.3b (2018)

@StatistaCharts   Source: Canalys   statista

Worldwide Public Cloud Service Revenue Forecast, 2018 - 2022
(Billions of U.S. Dollars) Source: Gartner April 2, 2019

Legend:
- Cloud Business Process Services (BPaaS)
- Cloud Application Infrastructure Services (PaaS)
- Cloud Application Services (SaaS)
- Cloud Management and Security Services
- Cloud System Infrastructure Services (IaaS)

Y-axis: Dollars In Billions

	2018	2019	2020	2021	2022
Cloud Application Services (SaaS)	$80.0	$94.8	$110.5	$126.7	$143.7
Cloud System Infrastructure Services (IaaS)	$30.5	$38.9	$49.1	$61.9	$76.6
Cloud Business Process Services (BPaaS)	$45.8	$49.3	$53.1	$57.0	$61.1
Cloud Application Infrastructure Services (PaaS)	$15.6	$19.0	$23.0	$27.5	$31.8
Cloud Management and Security Services	$10.5	$12.2	$14.1	$16.0	$17.9

Blockchain Is Critical To Future Of Data Storage –

Blockchain Is Critical

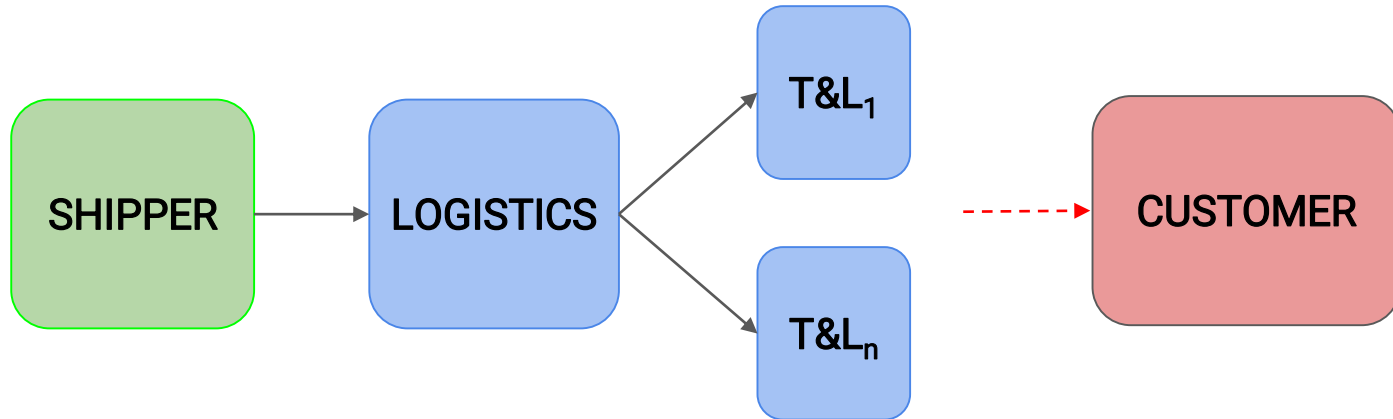|	
Dapp, DApp Explorers	Application layer
Decentralized DNS	
Decentralized Query	Infrastructure layer
Blockchain Level - State machine, Layer 2, interoperability, consensus, etc	
Decentralized Storage, Computing	
Decentralized Networking & Transport	
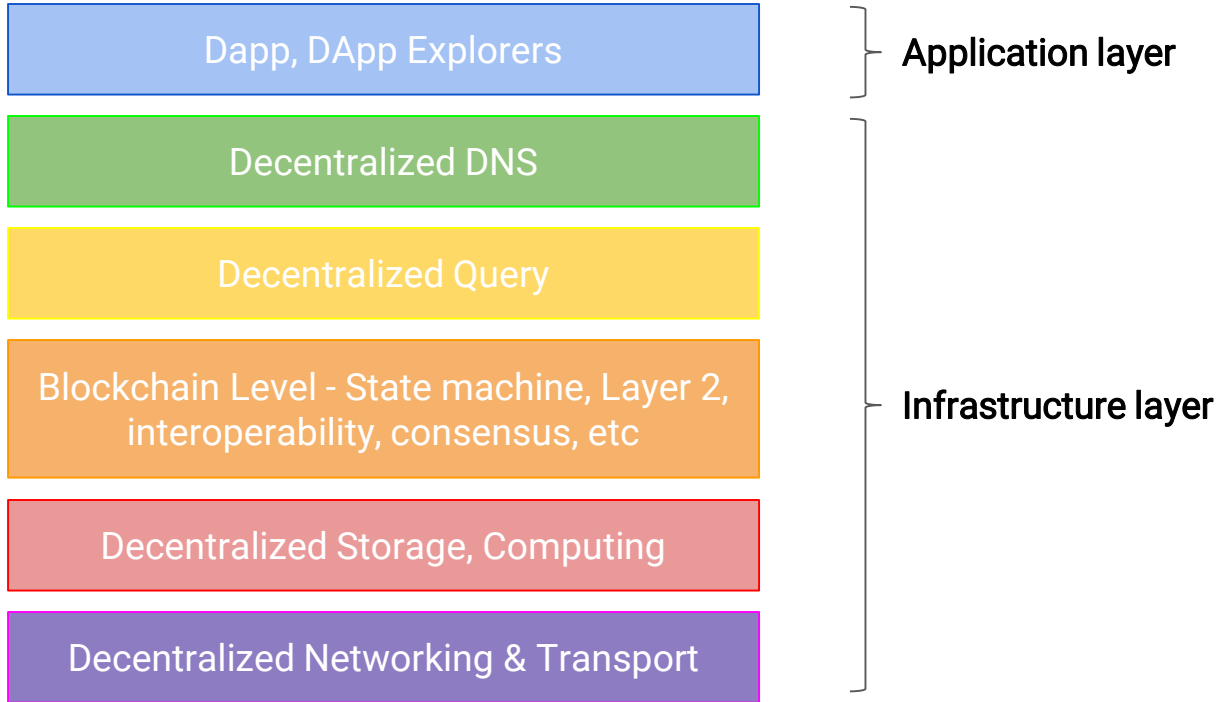
Blockchain Is Critical

Dapp, DApp Explorers	Application layer
Decentralized DNS	
Decentralized Query	
Blockchain Level - State machine, Layer 2, interoperability, consensus, etc	Infrastructure layer
Decentralized Storage, Computing	**digital real estate**
Decentralized Networking & Transport	

Amazon value chain

market
data
cloud

SHIPPER

LOGISTICS

CUSTOMER

17

SHIPPER

S_n

data
goods
market
cloud

T&L$_n$

LOGISTICS

CUSTOMER

C_n

goods market
data market
cloud market

open markets & p2p
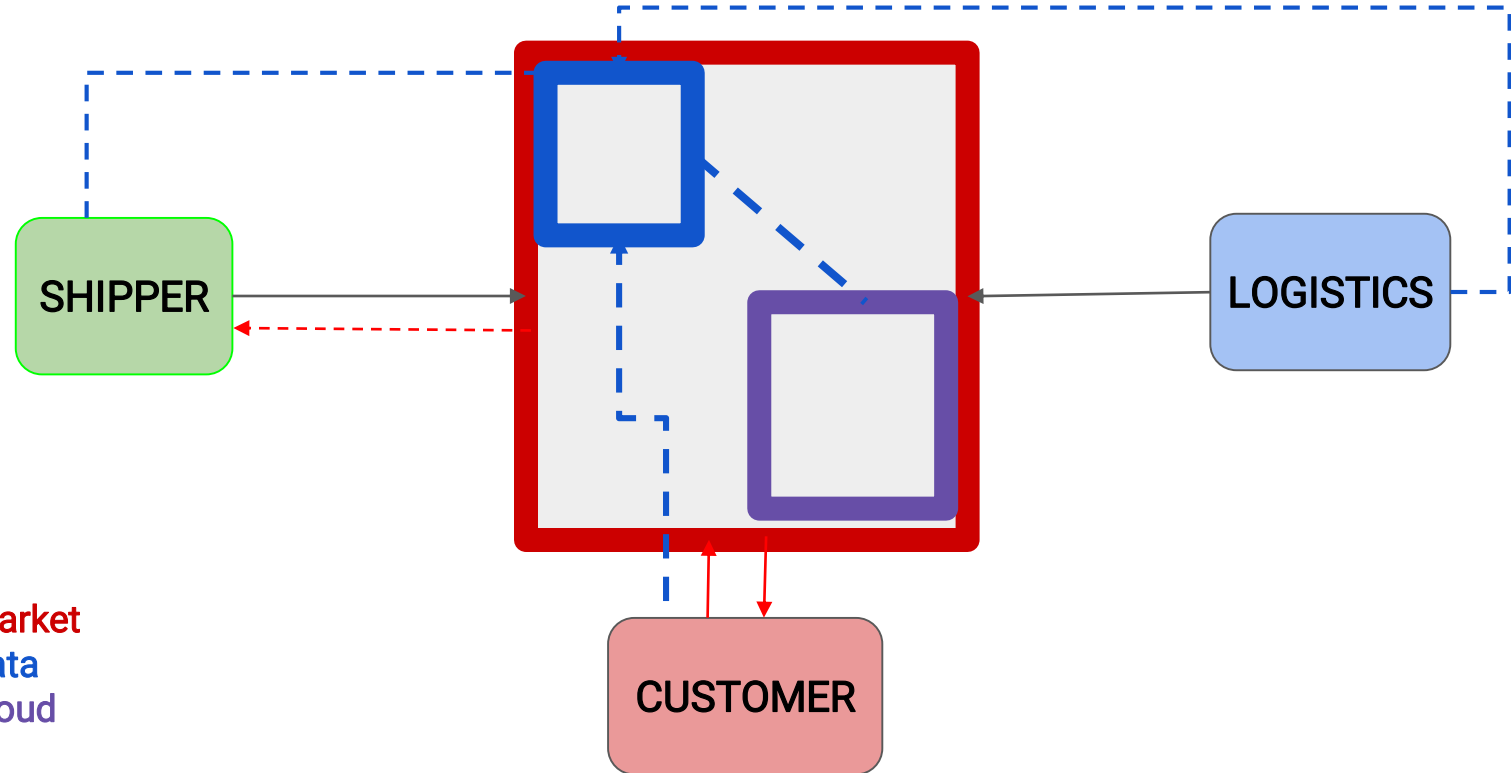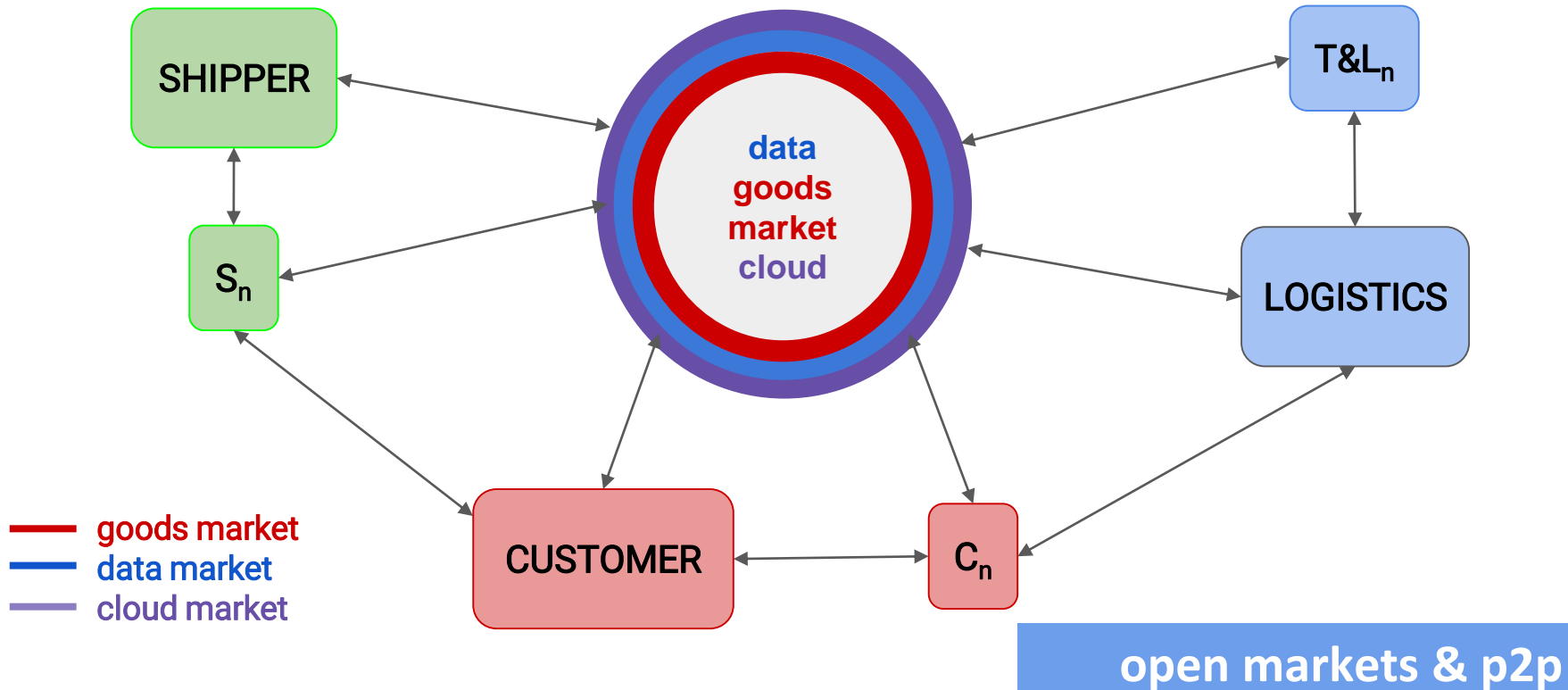
cases

case 1

case 1

Madrid

case 1

100.000 Tn / year

secondary processor → distributor / wholesaler → retailer / point-of-sale → consumer

restaurant / point-of-service → consumer

Downstream

B2B2C with e-commerce

new channels | products | **processes** | containers

case 1

4 phases
mutualized logistics & procedures

5 contributions
from digital exclusion to set the path

→ customization trends
→ business models
→ regulation & verification

case 2

Namur
BENELUX

case 2

a scooter is a 18kg parcel

Namur
BENELUX

CASE 2
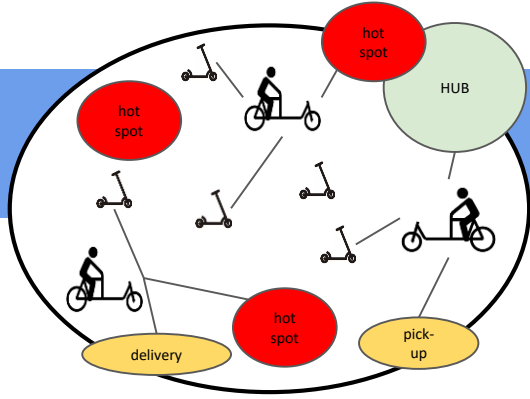
Operational *beyond cycle hunting*

Business development extend portfolio & geo

Business model(s) *systematise & scalability*

CASE 2

mutual scale up
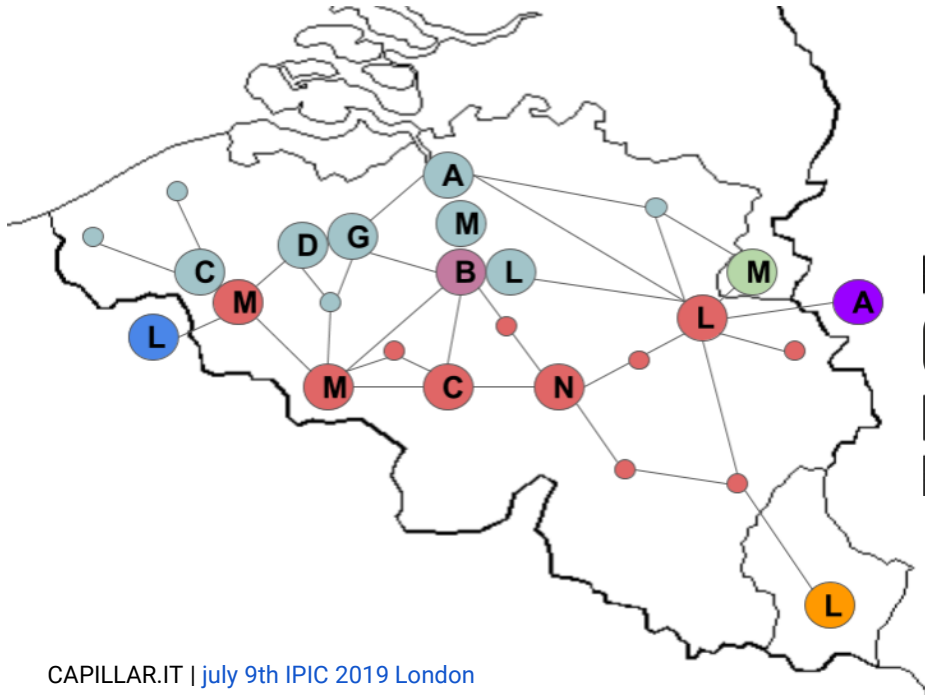
CICLOLOGISTICA

50 companies
30 cities
10-20 to scale up

BELGIAN CYCLE LOGISTICS FEDERATION

EUROPEAN CYCLE LOGISTICS FEDERATION

CASE 3

mobility for consumption

mixed for people and goods
with subsequent synergies in back & front end

→ e-commerce & last delivery
come to pick up & experience + *we arrive to* (deliver) *your experience*

→ eco restaurant
decarbonize (suppliers & customers) last miles

mobility from consumption

**business intelligence | shape & manage flows**

providing smart holistics systems

→ e-fleets | architectureS & real estateS | SW

→ size, design, test, deploy, scale up

who & where

🔴 capillar.it

🟢 coursier wallon cyclelogistics
            Namur, Mons

🟢 it optics SW
         GS1 France partner

🔵 holochain alter blockchain
            Linux Hyper Ledger market

⚫ el relevo cyclelogistics
          cooperative of entreprises
          Madrid

🟡 city Line collaborative logistics
           plan Marshall
           Wallonia EU

🟣 entrust data economy
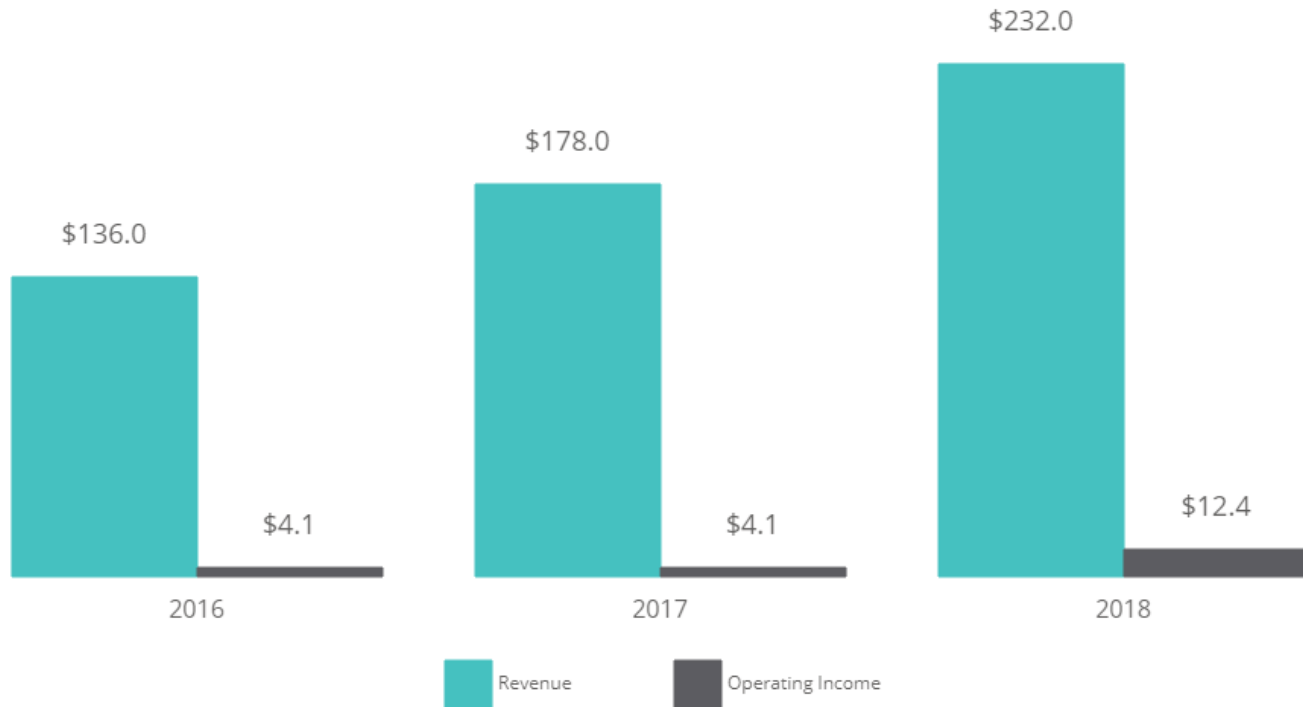   H2020 ICT13a 2019
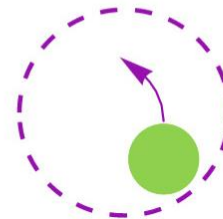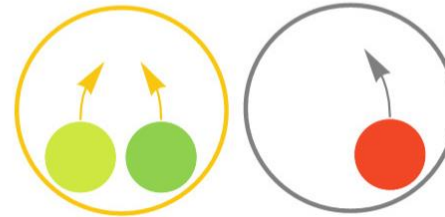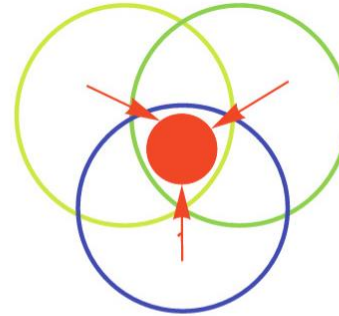
a Physical Internet company

contributing to develop the Physical part of Internet through logistics
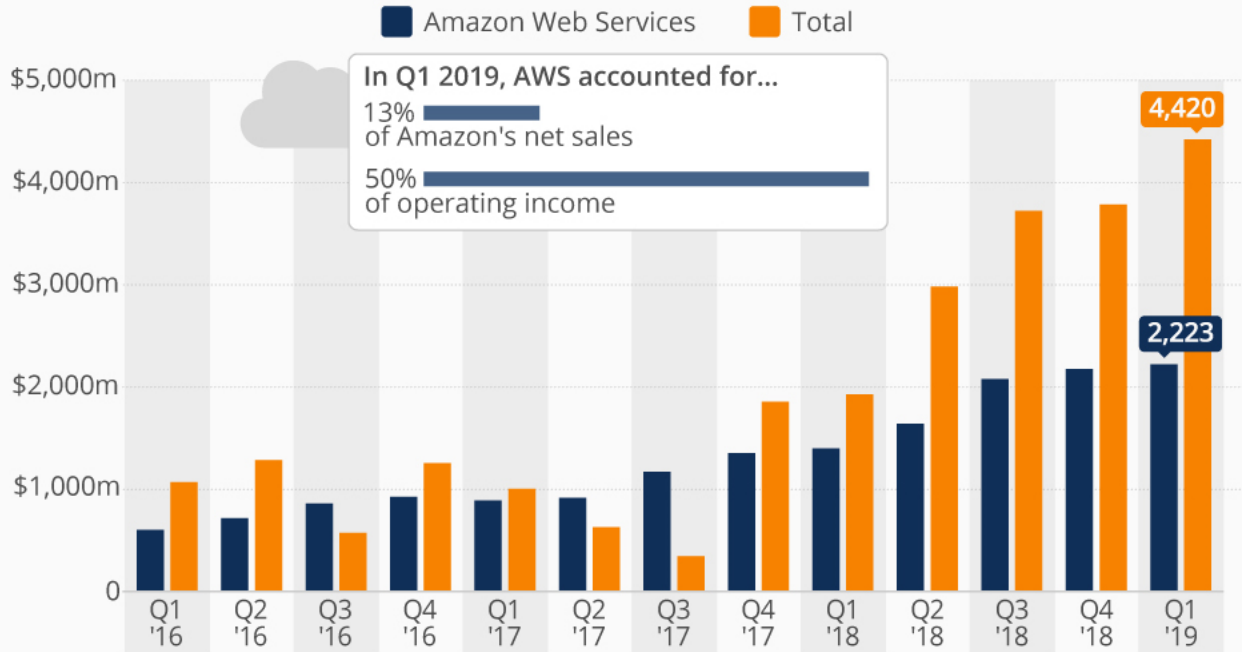
Physical² Internet   **our field of work**

the playground | what makes us different

Amazon Revenue Analysis (in Billions)

$232.0

$178.0

$136.0

$4.1 $4.1 $12.4

2016   2017   2018

Revenue   Operating Income

Cloud Business Drives Amazon's Profits

Amazon's quarterly operating profit (in million U.S. dollars)

■ Amazon Web Services   ■ Total

In Q1 2019, AWS accounted for...

13% of Amazon's net sales

50% of operating income

4,420

2,223

$5,000m
$4,000m
$3,000m
$2,000m
$1,000m
0

Q1 '16 Q2 '16 Q3 '16 Q4 '16 Q1 '17 Q2 '17 Q3 '17 Q4 '17 Q1 '18 Q2 '18 Q3 '18 Q4 '18 Q1 '19

@StatistaCharts   Source: Amazon

statista

Amazon Shipping Costs (in billions)

Source: Amazon earnings reports

GEEKWIRE

the playground

logistics spent **>** Inditex turnover worldwide (REF 3) $29.793 millions

60% of profits from cloud computing

the playground

The next AWS? Amazon emerges as a logistics heavyweight as it owns more delivery infrastructure

BY **TAYLOR SOPER** on June 28, 2019 at 9:45 am

the playground

→ customization disruption

→ in-synergies business model

→ digital real estate & logistics

the playground

the playground

DISCOUNTERS

**A year aft[...]
Whole Foo[...]**

PUBLISHED FRI, JUN 15 201[...]

Distribución

Amazon incentiva a sus 4.800 empleados españoles para crear sus propias empresas de reparto

the playground

A year after Amazon announc
Whole Foods, here's where w

PUBLISHED FRI, JUN 15 2018 · 2:34 PM EDT | UPDATED FRI, JUN 15 2018 · 6:56 PM

**Amazon Invests in U.K. Food-Delivery Startup
Deliveroo**

The British meal-delivery service said it raised $575 million in a recent funding round, led by the online
retail giant

41

the playground

DISCOUNTERS

A year after Amazon announc[ed] Whole Foods, here's where w[e]

PUBLISHED FRI, JUN 15 2018 · 2:34 PM EDT | UPDATED FRI, JUN 15 2018 · 6:56 PM

BUSINESS

Amazon Invests in U.K. Food-Delivery Startup Deliveroo

The British meal-delive[ry]... [fun]ding round, led by the online retail giant

capillarity

in the customer-centric value chains we

shape flows

providing smart holistics systems

with capillary business intelligence

orchestrating synergies

and technology

triggering next wave of disruptive business

the playground | what makes us different

what makes us different

→ **capillary logistics**

→ capillary empowered **data analytics**

→ **holochain** technology

what makes us different

→ **capillary logistics** 4 axes

1. **human |** front & back ends

1. **vehicles**

1. built infrastructure **urban real estate**

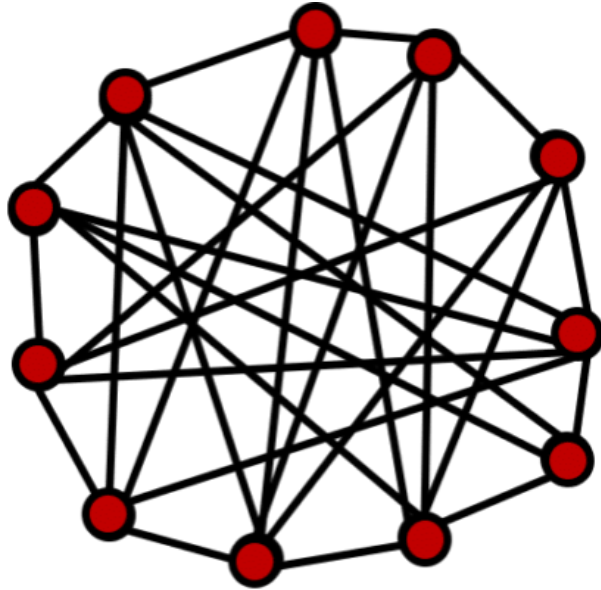1. **digital technology |** SW & **infrastructure**

what makes us different

digital infrastructure

→ architecture fits performance
→ agents <u>benefit from it</u>

digital real estate

what makes us different

distributed Physical Internet
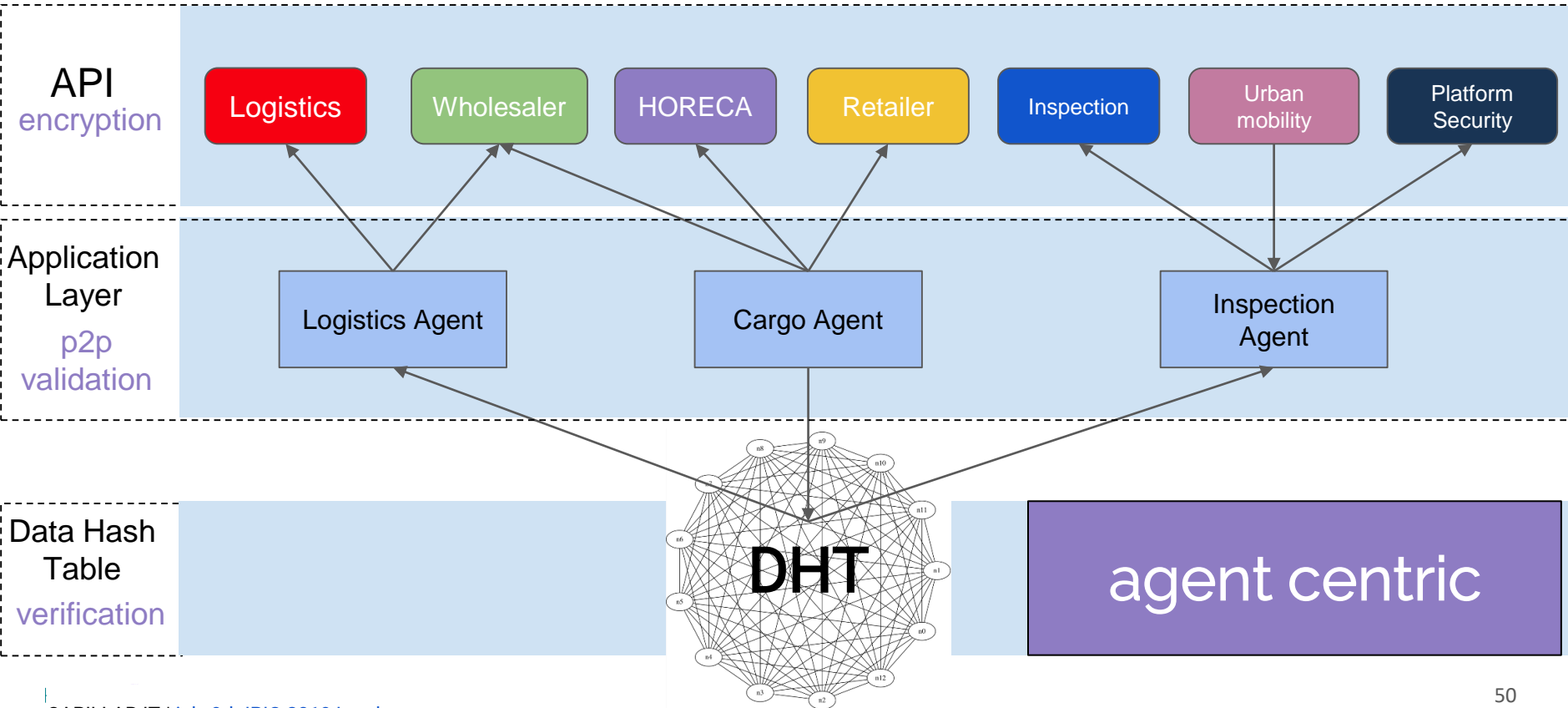
what makes us different

HOLOCHAIN | Linux of Hyper Ledger market
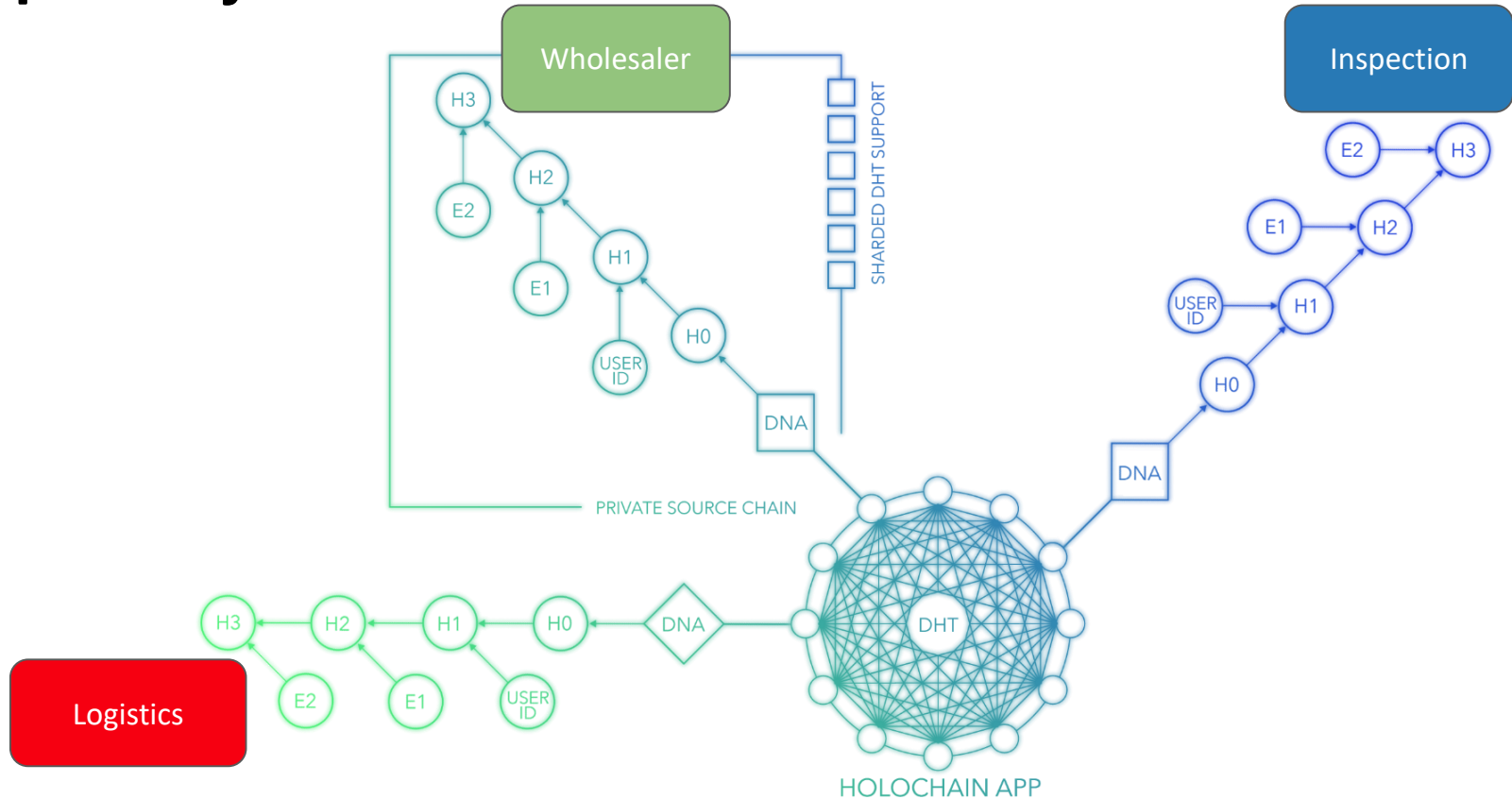
→ **DATA STRUCTURE** for distributed Apps

→ **SUPPORT** mutual credit & non monetary ccys

→ **POWERED by HOLO** cloud hosting AirBnb

hApp 1 | mutualized urban distribution

API
encryption

Logistics | Wholesaler | HORECA | Retailer | Inspection | Urban mobility | Platform Security

Application Layer
p2p validation

Logistics Agent | Cargo Agent | Inspection Agent

Data Hash Table
verification

DHT

agent centric

capillary is in the chain

what makes us different

HOLOCHAIN powered by HOLO

digital real estate optimized for

→ business integrity data & hosting control & ownership

→ interoperability

→ scalability

our difference

next level of customization

opens and enables agents to enter
new businesses driven by digitalization

→ **data**
→ **hosting** | cloud airBnB
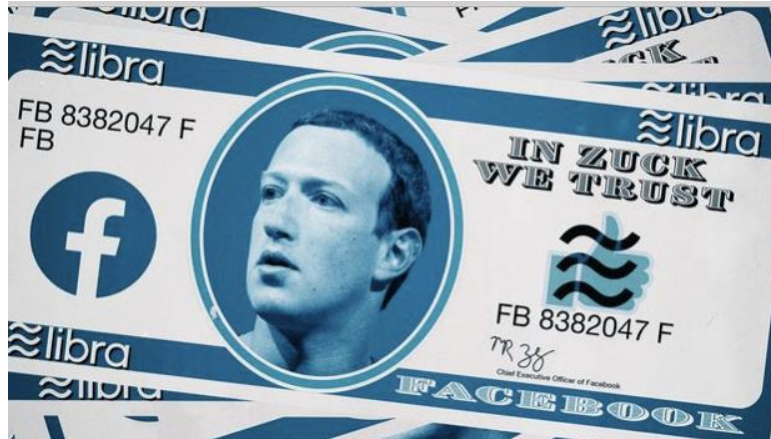→ **funding** | new crypto interactions

our difference

new crypto interactions | **open** funding

vs

just spending

our difference

vs

just spending

our difference

new crypto interactions | **open** funding
vs
just spending

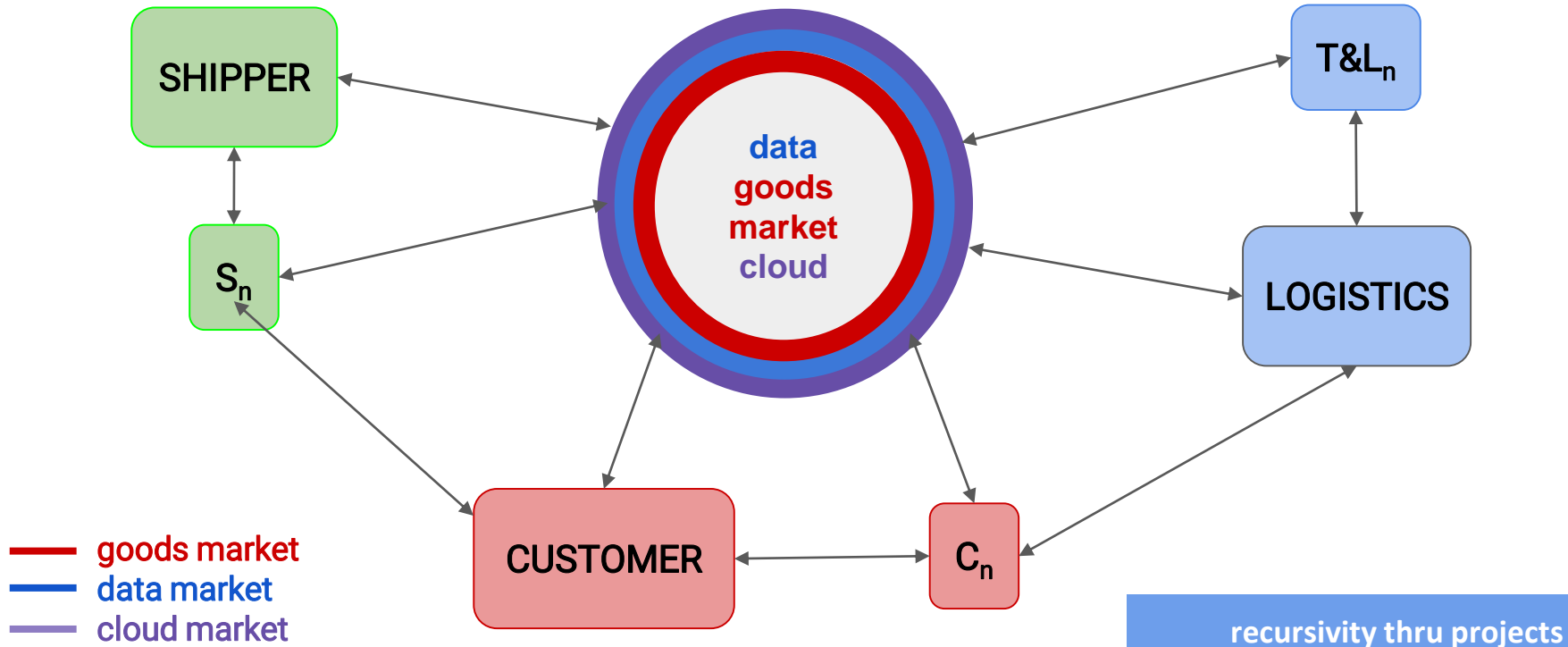## A Cryptocurrency by Amazon Would Be a Game-Changer

a year ago | Peter Compare

our difference

Amazon is quietly reshaping online commerce almost as dramatically as it reshaped offline commerce.

with zero transparency | control | access to make business

57

ownership & interoperability, by nature

SHIPPER

T&L$_n$

S$_n$

data
goods
market
cloud

LOGISTICS

CUSTOMER

C$_n$

— goods market
— data market
— cloud market

recursivity thru projects

seeds?

july 9th Physical Internet Award | IPIC 2019 London

| project@capillar.it

capillar.it