



Mobility Open Blockchain Initiative

building the *New Economy of Movement*



MOBI is a non-profit alliance of many of the world's largest automakers, along with many start-ups, non-profits, transit agencies, smart city leaders, and technology companies working to accelerate adoption and promote standards in blockchain, distributed ledgers, and related technologies.

Creating simple blockchain-based standards to identify cars, people, businesses, and to pay for mobility services, with the goal of making transportation more efficient, affordable, greener, safer, and less congested.

the COMMUNITY



WHY blockchain?

blockchain brings five unique capabilities

1. **digital twins** – permits secure identities and digital economics for physical things (vehicles, infrastructure...)
2. **micropayments** – efficient payments with minimal overhead, particularly when transaction sizes are small (congestion, parking, road usage...)
3. **trusted shared data** – reduces the cost of accounting and reconciliation between parties, especially for IoT transactions
4. **data privacy and protection** – blockchain applications are designed to prevent ‘scraping’ and aggregation of users & ecosystem data without permission
5. **incentives** – are the foundation of blockchain platforms





- Digital history, data, & supply chain tracking
- Autonomous machine payments
- P2P car & ride sharing
- Mobility commerce / Car wallet
- Data markets for Autonomous Vehicles and Mobility as a Service (MaaS)
- Usage-based fees (insurance, taxes, tolls, pollution, carbon, congestion, etc.)
- EV charging and grid integration

**Where does
blockchain add value?**



SINGAPORE – congestion (1998)

STOCKHOLM – congestion (2006)

MILAN – air pollution (2008)/congestion (2012)

LONDON – congestion (2013)/air pollution (2017)

NYC – congestion (2021)

SAN FRANCISCO – congestion (2021)

STRANDED CAPITAL

there is no direct way to charge for most transportation infrastructure, pay for repair, fund new projects, and recover the massive capital investment

TRAGEDY OF THE COMMONS

there are no effective tools to manage demand (existing user fees – i.e. gas taxes – cover only a small and decreasing portion of the cost)

RESOURCE MISALLOCATION

the wrong people pay, and pay far more than they should, when inefficiencies, congestion, externalities, and deferred costs are fully included

the public good **PROBLEM**

A space shuttle is shown in the process of launching, ascending into a blue sky filled with large, billowing white and orange-tinted clouds. The shuttle is positioned in the upper center of the frame, with a large plume of fire and smoke trailing behind it. In the foreground, the structure of a launch complex is visible, including a tall tower and various pipes and walkways. The overall scene is dramatic and captures the power of a rocket launch.

THANK YOU!

www.dlt.mobi



citopia

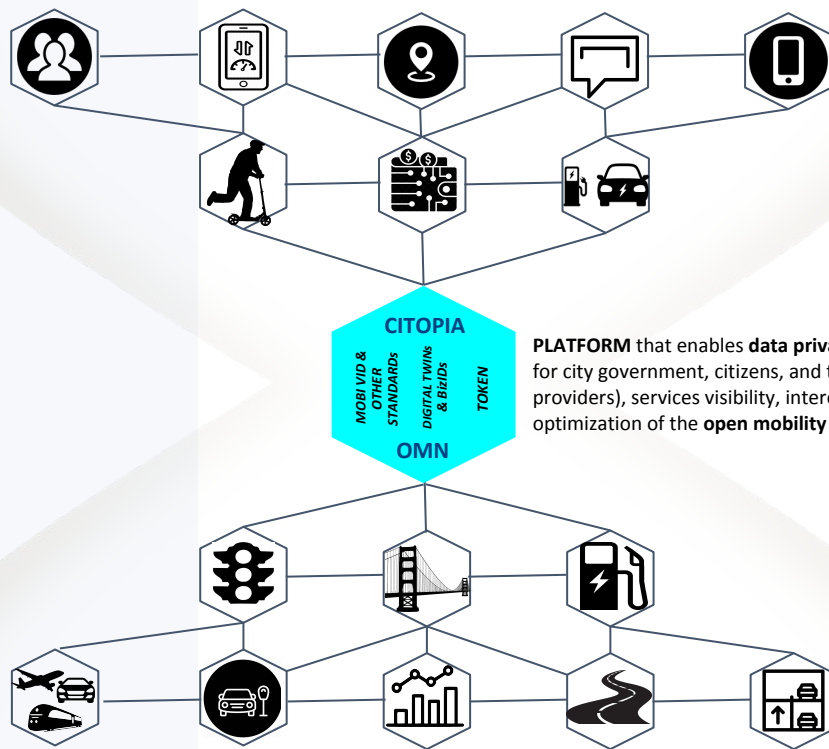
the new economy of movement

what? citopia ECONOMY


- *marketplace*
- *token*
- *MOBI community*

a tokenized ecosystem where mobility asset owners manage & charge for use of curbs, road use & wear, EV charging, green zone, congestion, carbon, pollution, etc.

d A P P S – for usage based consumption of assets



PLATFORM that enables **data privacy** (top concern for city government, citizens, and third party providers), services visibility, interoperability, and optimization of the **open mobility network (OMN)**

Sign In 

500 CREDITS AVAILABLE

0 LBS CO2 SAVED

0 TRIPS TAKEN






0 HEALTH SCORE

PAYMENTS

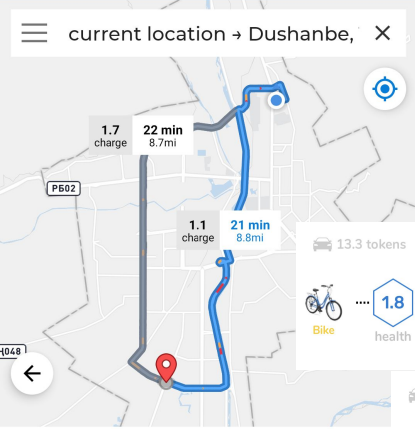
SETTINGS

PASSENGERS - 0 +

INSURANCE

- USAA ★★★★★ 
- FARMERS ★★★★★ 
- AIOI ★★★★★ 
- ACHMEA ★★★★★ 
- SWISS RE ★★★★★ 

current location → Dushanbe, X



13.3 tokens (Car) 1.8 tokens (Bike) 3.4 tokens (Walk)

1.8 health 0.0 service 0.0 other **1.8 token credit**

1.1 tokens (Car) 1.4 tokens (Bike) 2.6 tokens (Walk)

3.4 health 0.0 service 0.0 other **3.4 token credit**

MODEL 3: 10:48pm, 2.1 road, 1.9 zev, 0.9 other, **1.1 token charge**

IS 350: 10:48pm, 7.5 co2, 2.3 road, 0.9 other, **10.7 token charge**

start trip

CITOPIA platform

– open, privacy-preserving, multimodal mobility services PAYMENT platform built on blockchain. The platform allows the monetization of connected vehicles and authorized, trusted data from users in the ecosystem to pay for infrastructure use and other mobility services

the MARKETPLACE

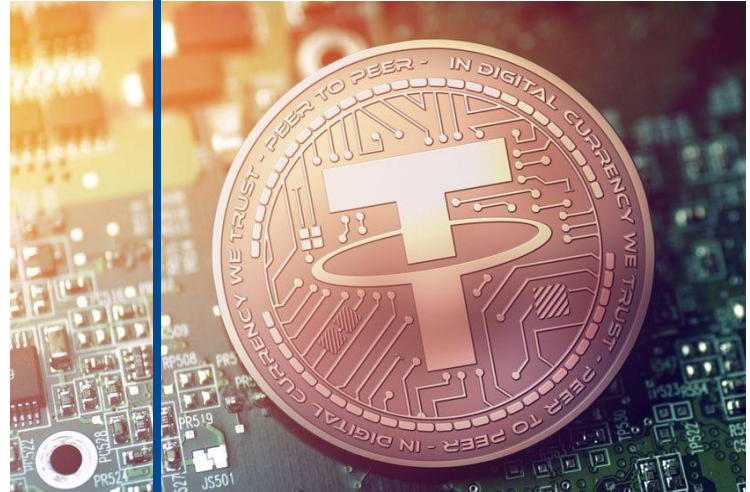
the stable TOKEN

“Unless you want the payment rail for your business running on some other company’s infrastructure, with that company capturing most of the upside, then you better get your act together and design a coin.”

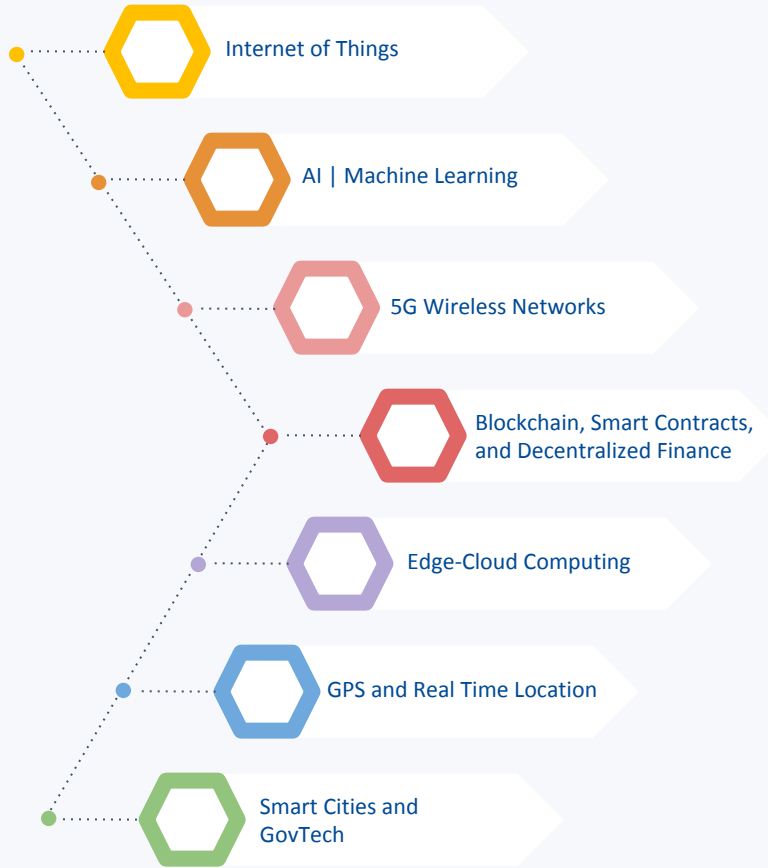
Alex Tapscott

CARBON – native token of CITOPIA

- *asset-usage-rights token (AURT) for X2X payments*
- *backed by infrastructure and mobility usage rights*
- *stable value maintained by arbitrage*
- *enables efficient monetization of road infrastructure*
- *patent pending*



why now? CONVERGENCE



CITOPIA

*the new economy of
movement in smart cities*

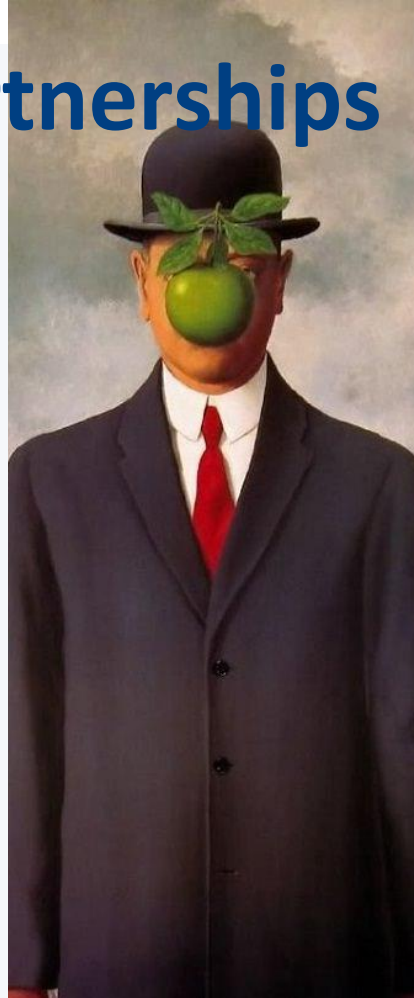
the **convergence** of multiple rapidly maturing technologies permits anything – a person, vehicle, or piece of infrastructure – to have an identity, be intelligent, and transact with other things

Government Partnerships



Signed LOI with Two US States for Complete Trip- ITS4US Deployment Program Proposal

Citopia, representing a coalition of public and nonprofit agencies, will develop a transformational blockchain-based mobility platform for the ITS Complete Trip program by building and integrating The Mobility Open Blockchain Initiative's (MOBI's) Open Mobility Network (OMN) and the Citopia mobile application. This integration will create a **multimodal mobility platform** that will **ingest, organize, and securely exchange data in order to plan and execute Complete Trips**. The Deployment will **provide a singular payment gateway** that executes payments for each mode of transportation in a given Complete Trip, in real time, as the trip is occurring.



Signed Service Agreement with a Small Country

- **Phase I:** testing Vehicle Wallets as a payment method using government vehicles, including 3 Ferries and 20 buses, for Road Use Charge (RUC), CO2 and congestion pricing, and parking usage charge over a trial period (6-12 months) using simulated token payments on Citopia platform
- **Phase II:** expand the project to include civilian vehicles for the use cases listed in Phase I and other smart city applications for an additional 12-month period
- Included in Phase II (or Phase III): implementation of multi-modal mobility application in Citopia platform for residents, integrated with ferry and other transit systems, that uses a USD stable token for payments of transit costs



THANK YOU!

“As disruptive and important as the PC and the Internet”

Marc Andreessen

inventor of the internet browser on blockchain technology, 2014