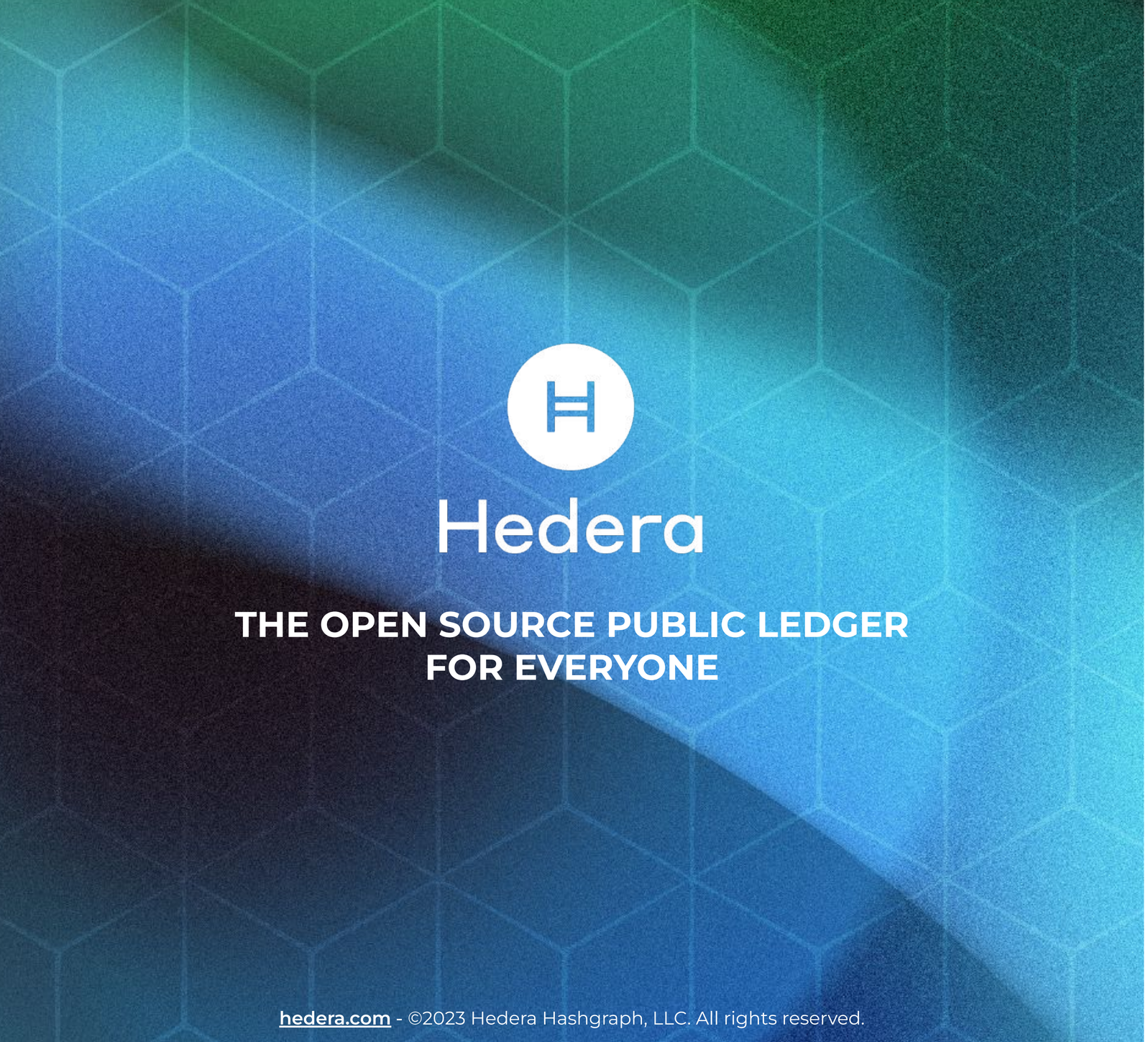


What else is possible?

Exploring the future of blockchain innovation with Hedera.

hedera.com - ©2023 Hedera Hashgraph, LLC. All rights reserved.

OUR JOURNEY

Matt Woodward

Head of Developer Relations at Swirlds Labs

Connect with me!

@woodwardmatt

/in/woodwardmatt

"An experienced, full-stack developer, by trade, I love all things software, technology, and innovation. I have a deep passion for Web3 and NFTs projects, empowering developers through learning opportunities and leading with empathy."

LED ZEPPELIN

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

The Promise: Fair & Trusted Results At Scale

THE EVOLUTION OF DISTRIBUTED CONSENSUS

1. Fast value transfer with digital currency
2. Identification/ownership of things: land, devices, stock shares, music
3. Complex and trustless agreements between two participants (smart contracts)
4. Fair matching & settlement of many contract participants

©2023 Hedera Hashgraph, LLC. All rights reserved.

The Problem

Early layer one DLTs like Bitcoin and Ethereum have inherent weaknesses that pose challenges to mass adoption:

ENORMOUS AMOUNTS OF **ENERGY**

LOW PROCESSING **SPEEDS**

HIGH, UNPREDICTABLE PROCESSING **COSTS**

SECURITY VULNERABILITIES

CENTRALIZATION AND **TRANSPARENCY** CONCERNS

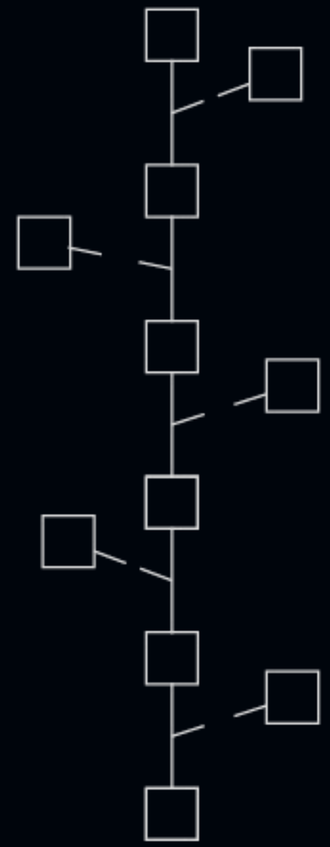
©2023 Hedera Hashgraph, LLC. All rights reserved.

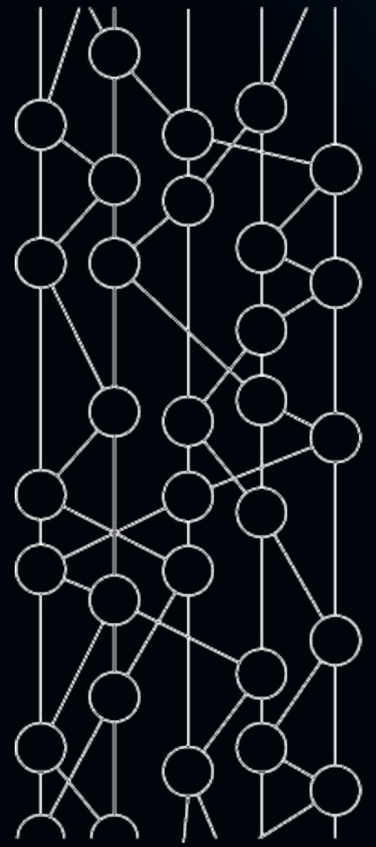
So Why Hedera the Solution?

Let’s talk tech & what we do differently...

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

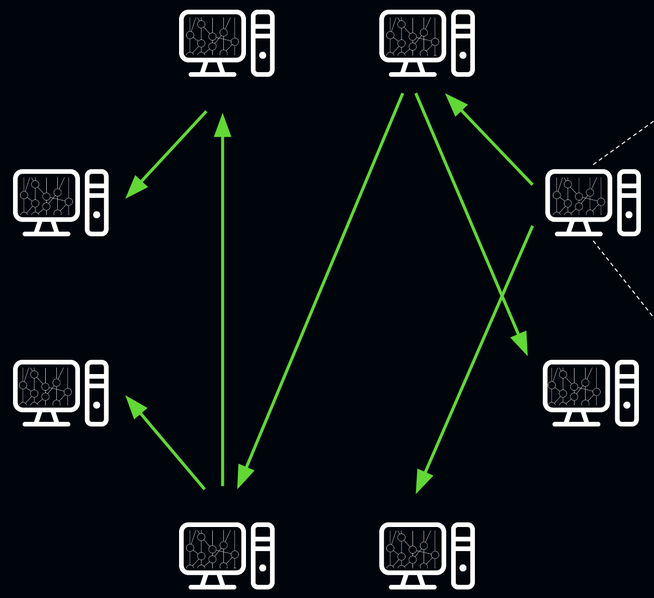
Not Blockchain: We’re a Hashgraph!

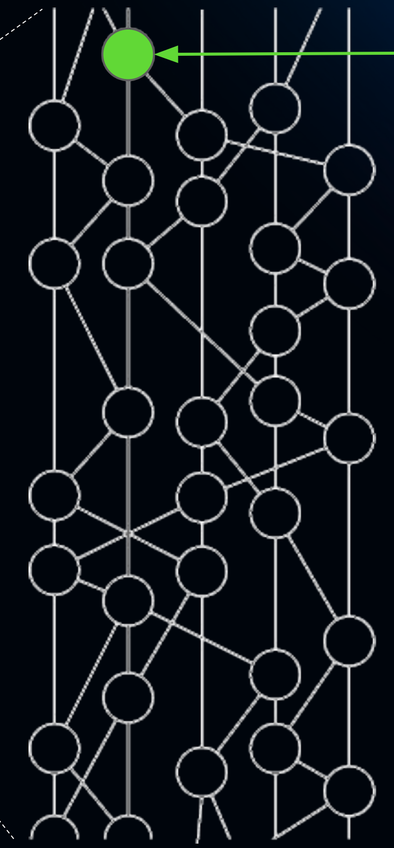




Gossip about Gossip: Quick data sync

The new event is quickly copied between nodes through gossiping!

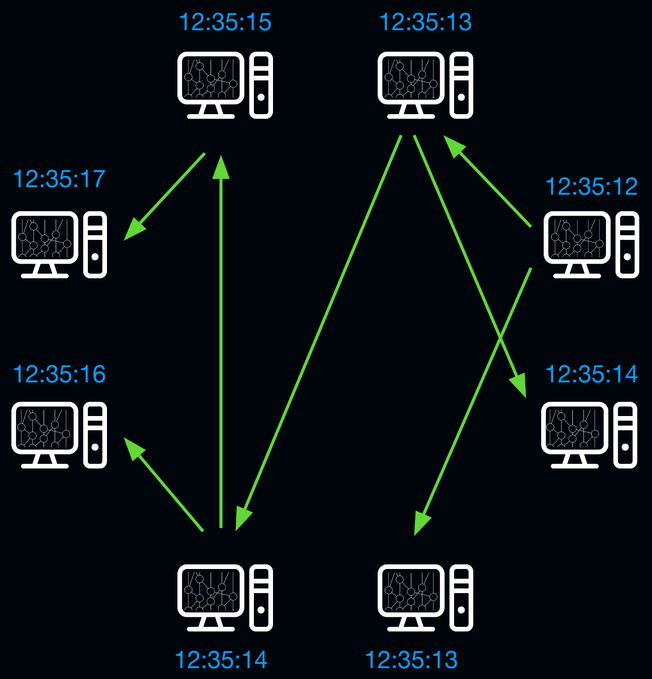




New Event added to the Hashgraph containing signed transactions

Virtual Voting: Fair Transaction Ordering

Each node stores a timestamp for when an event is received, and shares that with other nodes too



List of timestamps, known by every node through gossiping

12:35:12
12:35:13
12:35:14
12:35:13
12:35:15
12:35:17
12:35:16
12:35:14

Ordered list of timestamps, with median selected.

12:35:12
12:35:13
12:35:13
12:35:14
12:35:14
12:35:15
12:35:16
12:35:17

💳 1,000x less energy than a Visa Transaction

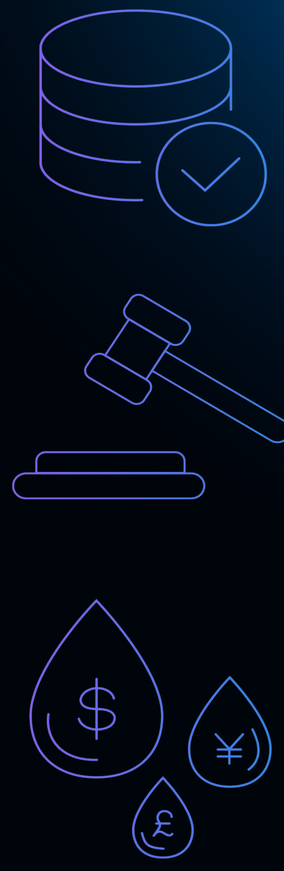
📊 Predictable costs - Fixed to USD

🪴 10K TPS Throughput - So you can scale!

⚡ 3 - 5s transaction finality for a responsive CX

The Hedera Governing Council

abrdn
AVERY DENNISON
BOEING
Chainlink Labs
COFRA
DBS
DELL Technologies
DENTONS
Deutsche Telekom
DLA PIPER
EDF
eftpos
FIS
Google
IBM
IIT MADRAS
LG
LSE
Magalu
NOMURA
servicenow
SHINHAN BANK
Standard Bank
Swirlds
TATA COMMUNICATIONS
UBISOFT
UCL
wipro
zain



Network decisions:

- Feature decisions (HIPs)
- Governance policies (GRC)
- Network API prices (in USD)
- Token economics (incentives)

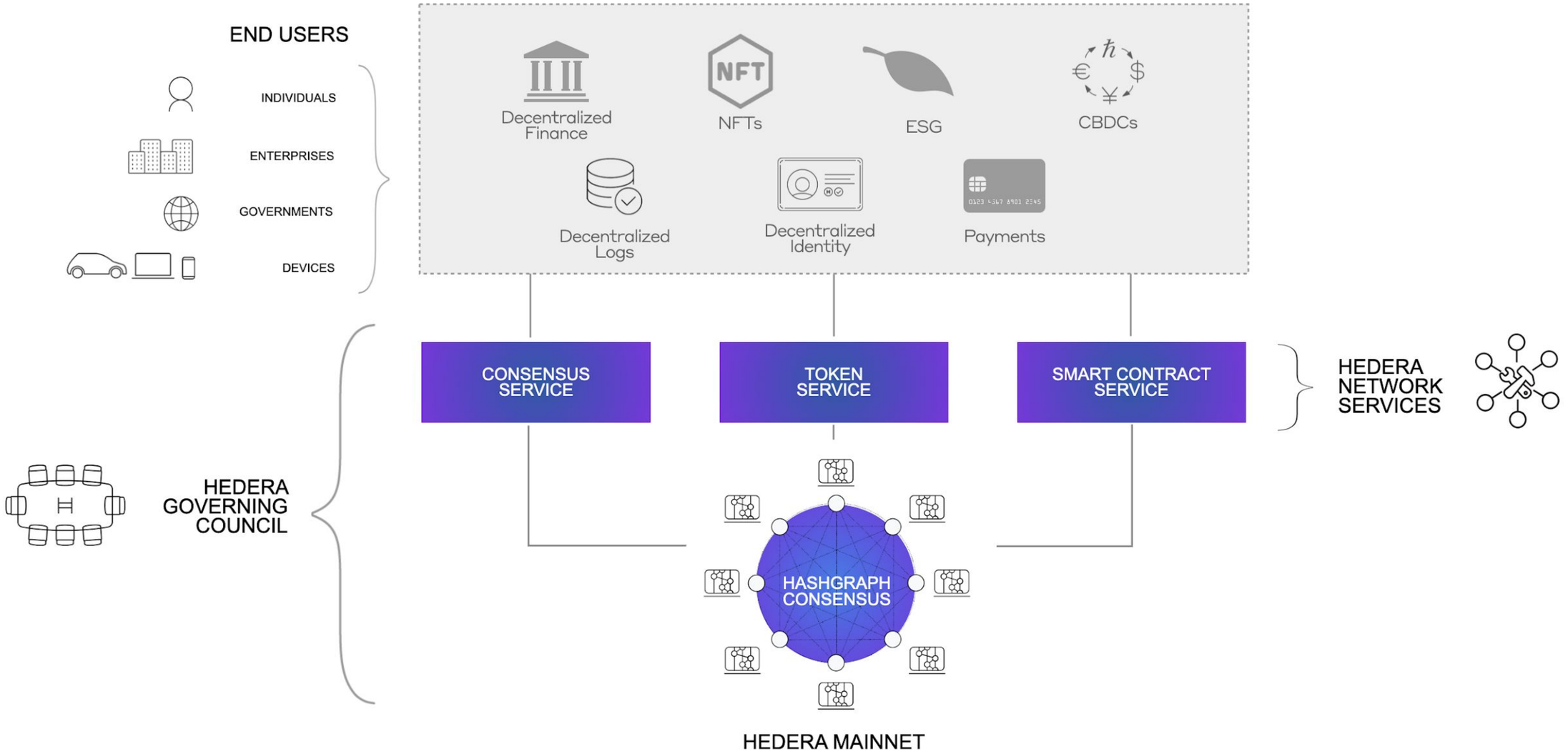
©2023 Hedera Hashgraph, LLC. All rights reserved.

What’s different about Hedera?

Isn’t it all just “transactions” anyway?!?

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

Hedera: A leaderless, proof-of-stake public network



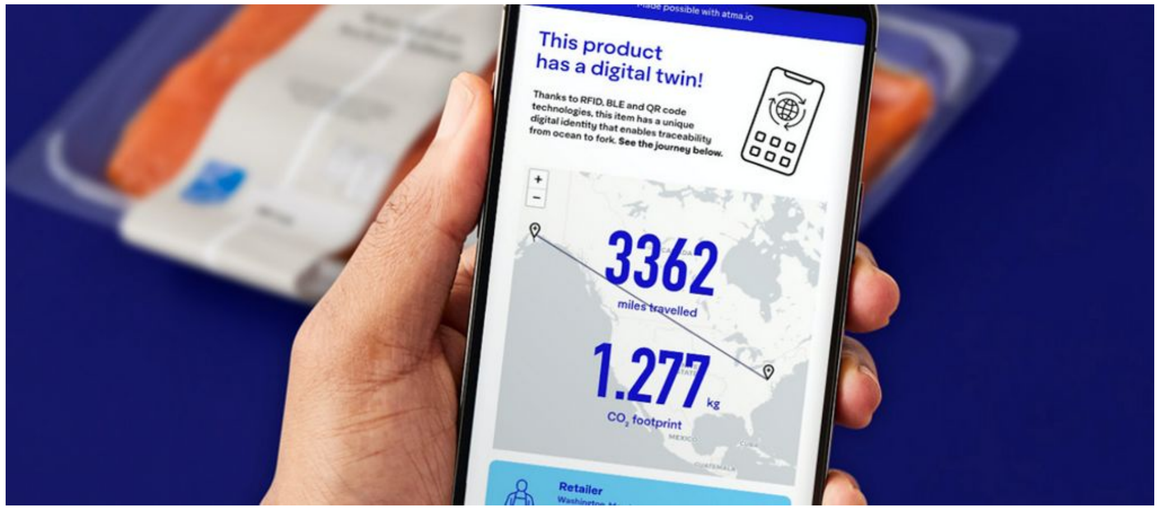
hedera.com - ©2023 Hedera Hashgraph, LLC. All rights reserved.

What’s built on Hedera right now?

Let’s look at some of our use cases...

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

Proof of Provenance - Visit atma.io



"We're excited to start pushing billions of item-level data transactions through the Hedera network to deepen the connection between the physical and digital worlds, delivering unprecedented visibility across supply chains and a higher level of computational trust that is required for a more sustainable and connected world."

MAX WINOGRAD

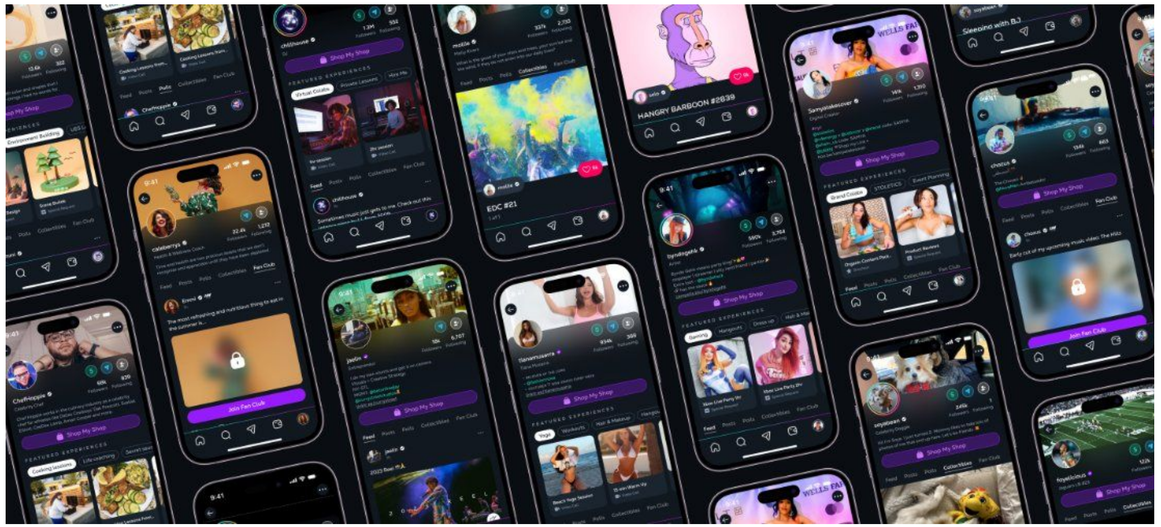
VICE PRESIDENT, CONNECTED PRODUCTS, AVERY DENNISON

22B+	300+	5,000+
ITEMS CONNECTED TO CLOUD	NEW ITEMS ADDED PER SECOND	GLOBAL FACTORY PARTICIPANTS

BUILT ON BY AVERY DENNISON

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

Creator Economy - Visit calaxy.com



“Hedera gives Calaxy the ability to create a truly decentralized platform that empowers creators with greater control over their data, content, and how they offer online experiences to their communities, that is also highly secure, and performant”

SOLO CEESAY

CEO AND CO-FOUNDER, CALAXY

250	$275B USD	$0.001
CELEBRITIES & INFLUENCERS	CREATOR ECONOMY SIZE	USDC TRANSFER FEE

BUILT ON BY CALAXY

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

Sustainability - Visit hyundaimotorgroup.com

“Blockchain technology holds the key to a revolutionary approach in managing carbon emissions and combating climate change, ushering in a new era of sustainable supply chains within our cooperative network. We stand proudly at the forefront of this transformative journey, collaborating with our partners to shape a greener and brighter future for all.

SEUNG HYUN HONG

HEAD OF MATERIALS RESEARCH AND ENGINEERING CENTER

250	$275B USD	$0.001
CELEBRITIES & INFLUENCERS	CREATOR ECONOMY SIZE	USDC TRANSFER FEE

BUILT ON BY HYUNDAI | KIA

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

Sustainability - Visit tymlez.com

TYMLEZ (ASX:TYM) is a pioneer in the development and delivery of carbon reporting and guarantee of origin solutions built on the Hedera network. TYMLEZ provides companies across the globe with world-class solutions designed to empower them in their decarbonisation journeys.

US$851B
VALUE OF GLOBAL CARBON MARKETS

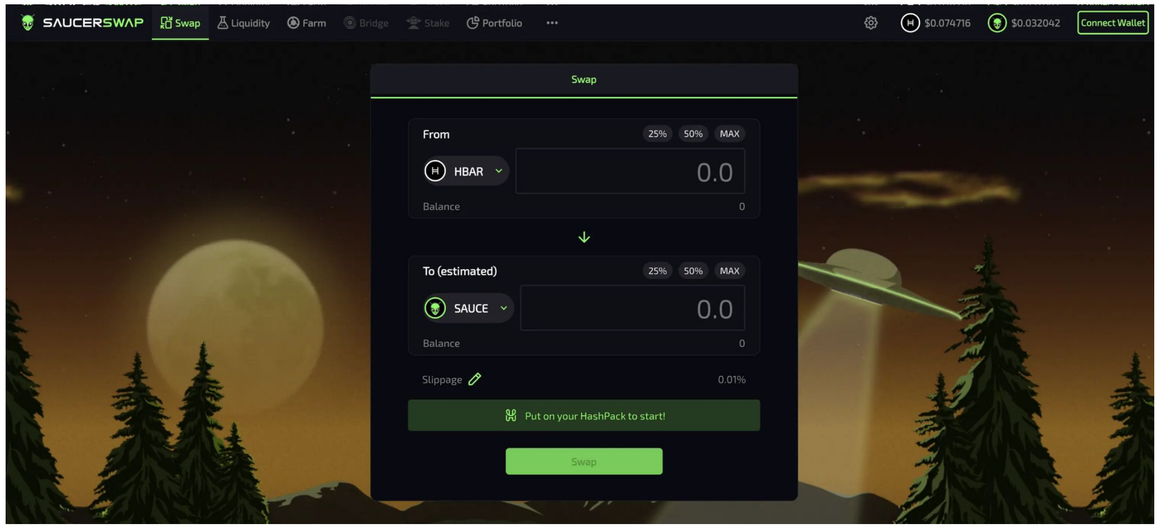
US$72B
GREEN HYDROGEN MARKET VALUE BY 2030

US$3B
DAILY FUNDS BEING INVESTED INTO ESG ASSETS

BUILT ON BY TYMLEZ

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

Decentralized Finance - Visit saucerswap.finance



“Hedera has some obvious advantages to other L1 blockchains, including those around speed, trust, and cost, and allows us to think pretty openly and get creative about what a DEX can be and what kind of functionality we can offer to our users.”

PETER CAMPBELL

CO-FOUNDER & OPERATIONS CO-LEAD, SAUCERSWAP

US$30M+	US$100M+	US$1M+
TOTAL VALUE LOCKED	TOTAL SWAP VOLUME	LIQUIDITY VIA HASHPORT

BUILT ON ℏ BY SAUCERSWAP LABS

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

How can I get involved with Hedera?

Get ready to scan some QR codes!

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.

Developers - Get Started on Hedera

The fastest way to get started building applications and ecosystems for the next generation of the web.

https://hedera.com/getting-started

hedera.com - ©2023 Hedera Hashgraph, LLC. All rights reserved.

Community - Get Started on Hedera

Permissionless web3 applications powered by Hedera. Connect into the innovative startups decentralizing the web on Hedera.

SCAN ME

https://hedera.com/ecosystem/web3-applications

hedera.com - ©2023 Hedera Hashgraph, LLC. All rights reserved.

Questions / Discussion

What came up for you? There are no silly questions!

 - ©2023 Hedera Hashgraph, LLC. All rights reserved.