traent

TRAENT PRESENTATION

Italian Distributed Ledger Technology Working Group Presentation

07.11.2022

whoami & traent

Fabio Severino

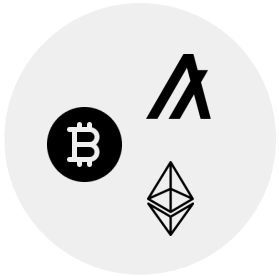
CTO

10 years-experience in developing software products, entrepreneur, leading research and development at Traent

- Founded in 2019 by Federico d'Annunzio & Fabio Severino
- Located in Pisa, Italy
- Easy-to-use Enterprise blockchain solutions based on Traent Era
- Filed 8 international patents

traent

Types of blockchain

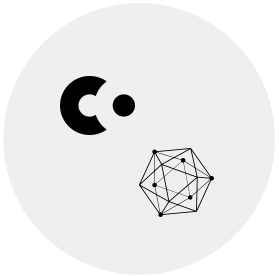


Public (permissionless)

Anyone can be a participant

Every node has the same power (read/write/validate blocks)

Example: Bitcoin, Ethereum, Algorand



Private (permissioned)

Access is restricted to allowed nodes

Some nodes are more special than others

Example: Hyperledger

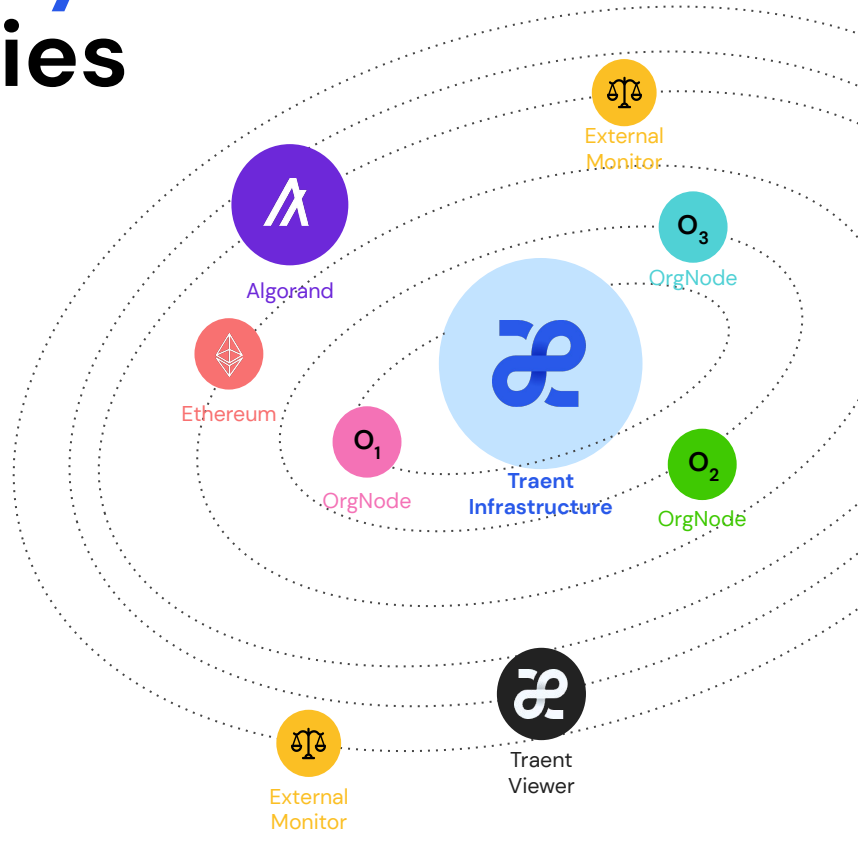
Types of blockchain: pros and cons

	Public (permissionless)	Private (permissioned)
PROs	+ Immutable as it can be + Maximum transparency	+ Fast transactions + Can restrict access
CONs	- Forced Transparency - Very low TPS (transactions/s) - Very limited storage per transaction - 1MB = (20000 * 32768) * 10^{-9} * 178 * 4700 $ = ~550k $ - 1MB ~ Min 130 blocks ⇒ 30min - Cannot remove data (cannot comply with GDPR)	- Less secure - Not auditable. No guarantees to external agents that the data has not been tampered with. New nodes or external players have to trust a private blockchain network without having any control over the verification

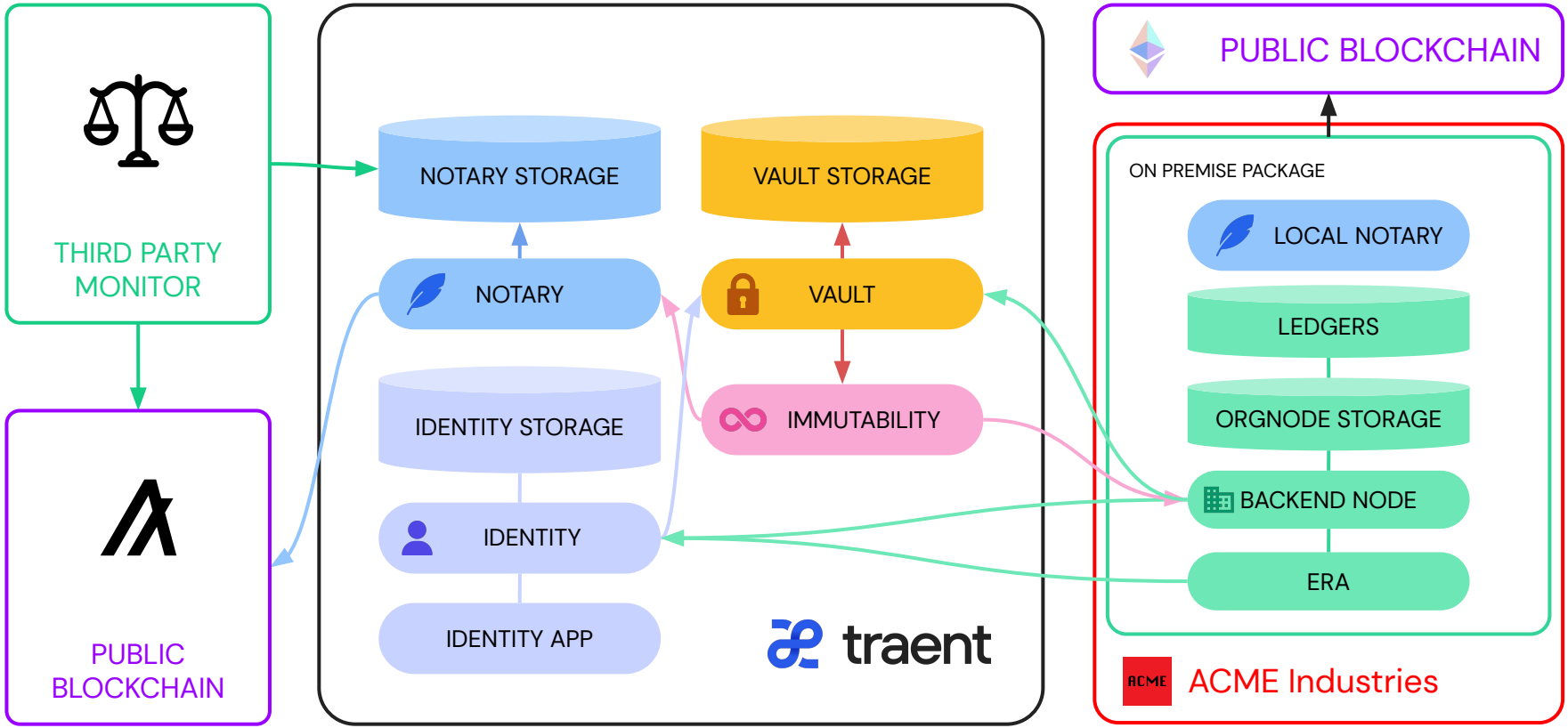
at traent we develop hybrid blockchain technologies

a novel technical solution to enable real-time and data-intensive applications on blockchain while ensuring auditability of private ledgers.

Easy. Actually scalable.
Fast. Cheap.



High level design




era

Era a collaboration platform

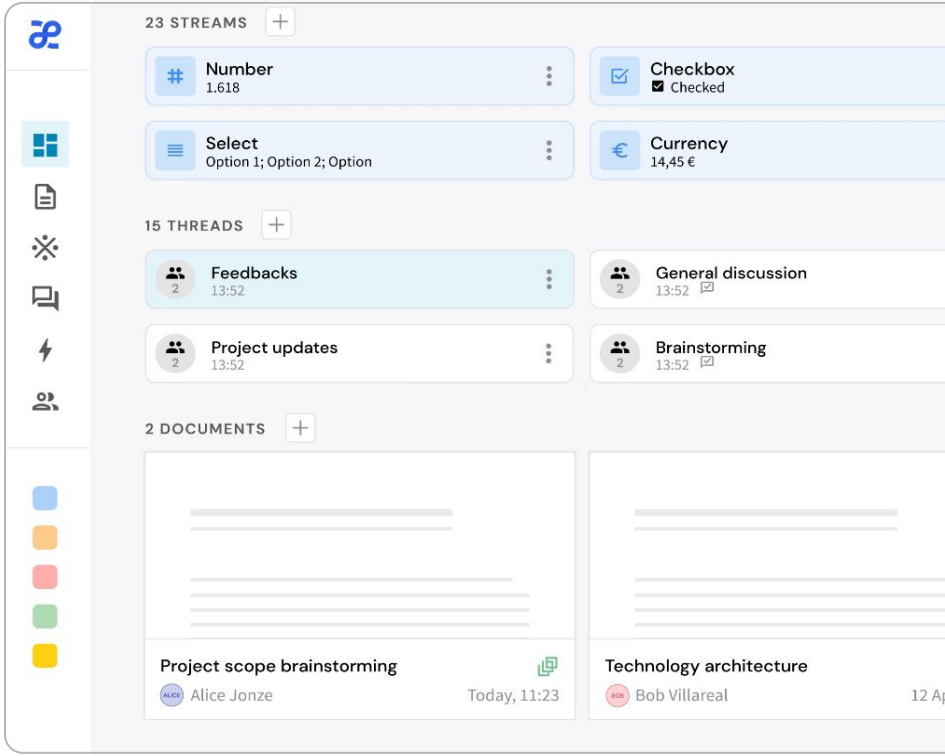
Traent Solutions

Every interaction is based on a network of hybrid blockchains

1. Create no-code smart contracts

2. Share documents, data streams instantly and messages instantly

3. Connect any data source to projects and leverage automations



No additional environmental impact

Authentic third-party validated data

Unlimited data exchange & storage

data privacy & data ownership

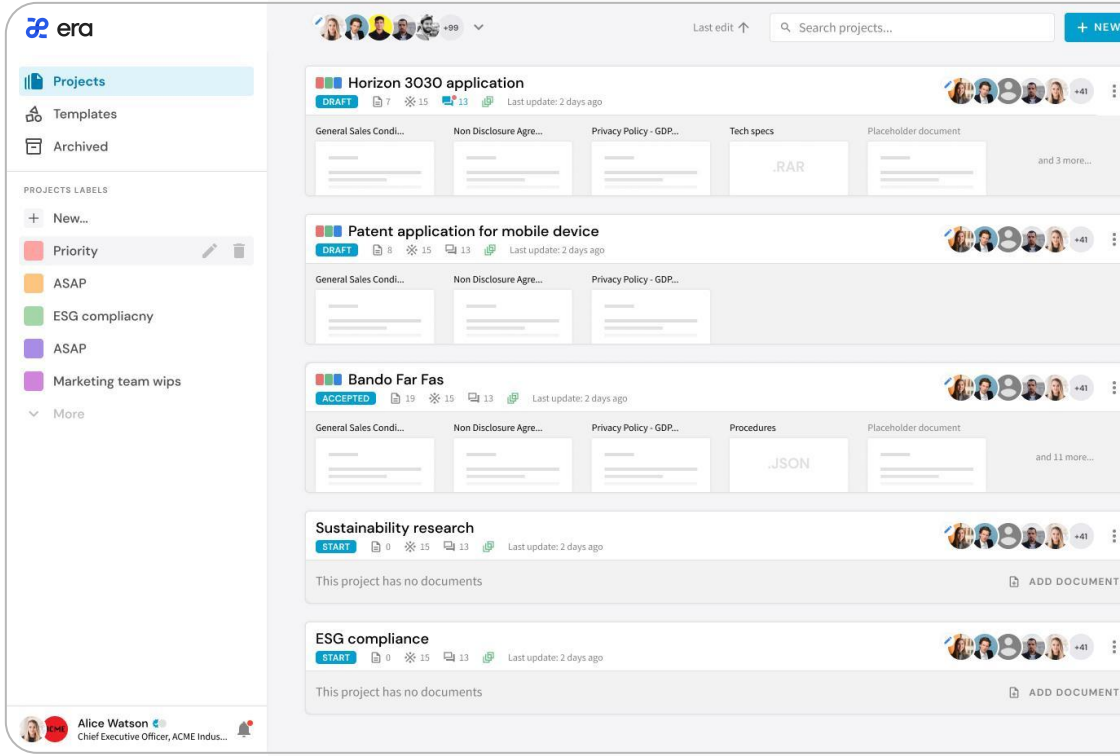
Era a collaboration platform

Traent Solutions

Era allows creating, managing, and sharing projects with colleagues, business partners, and external parties with granular permissions.

Each project is regulated by a **Workflow** and can contain:

1. Streams
2. Documents of any type
3. Threads



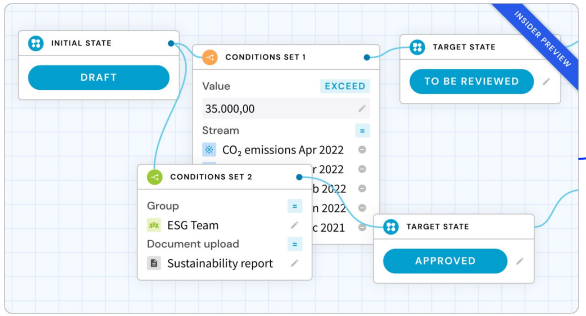
Era Workflows

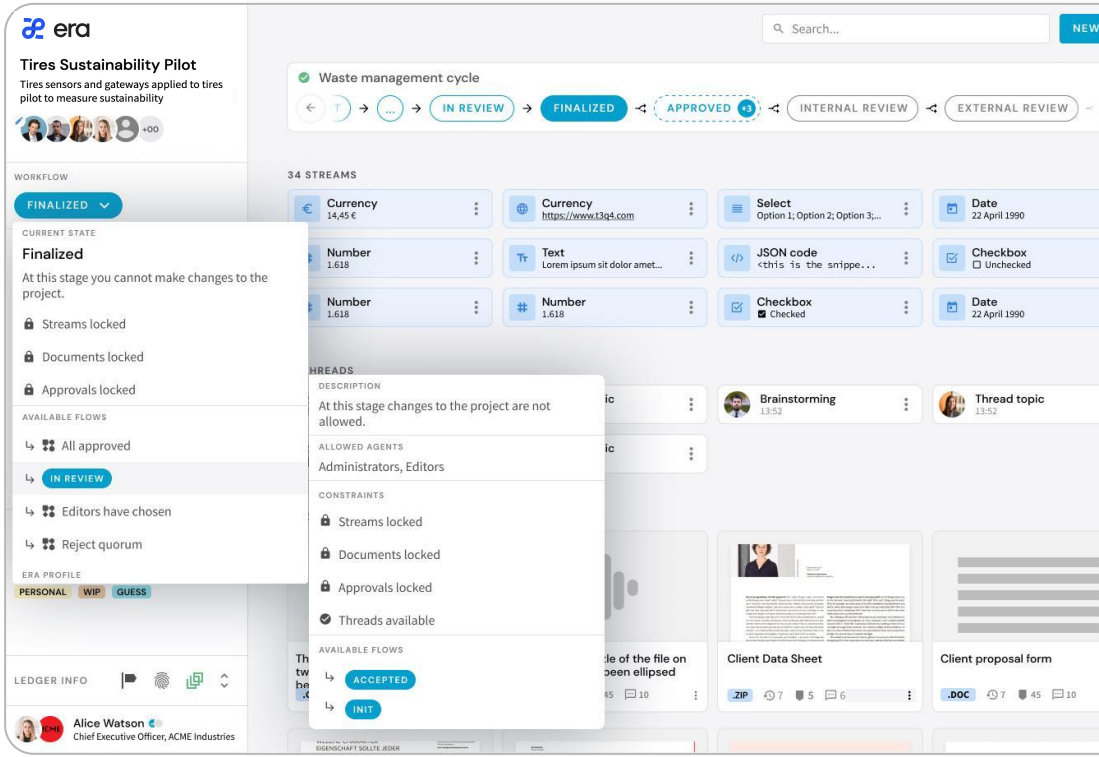
Inside Era

A **workflow** is a smart contract that regulates a project

As all blockchain concepts in our solution, the user can understand from the UI the stage of the project and the actions they can perform.

In other blockchain solutions it is necessary to have programming skills to create a smart contract. With **Era**, they can be made with our visual editor.





Data sharing, how does it works?

Granular data disclosure

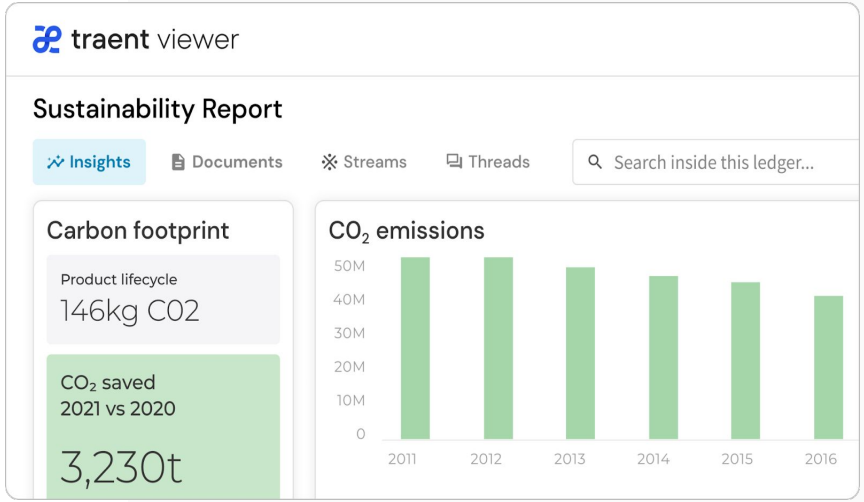
Direct browser access to blockchain data
by third parties outside the network

01 Automatically put rolls data with Era

- creating projects on various private blockchains, on for each roll.
- *Era* stores the data's cryptographic proofs on a public blockchain

02 Choose what to show from a ledger

03 Show the relevant data through Traent Viewer



Fast track transparency for general public & auditors

fully auditable blockchain content

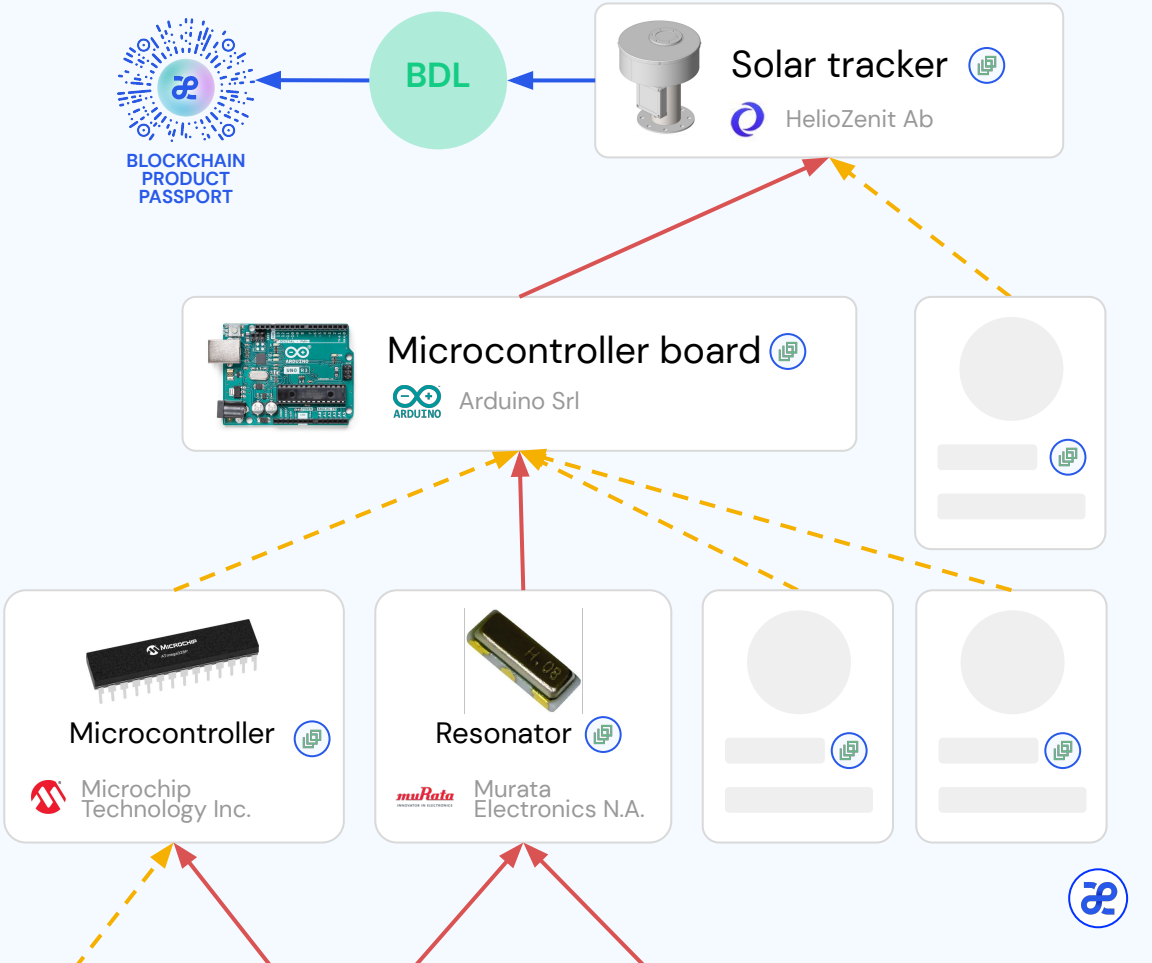
Case study

A project can be made of several interconnected blockchains.

In a supplychain, each **data owner** that is part of the network can choose to either disclose it fully, or in a **granular way** to maintain **confidentiality** and competitive advantage (e.g., prices, supplier details, technical specs…).

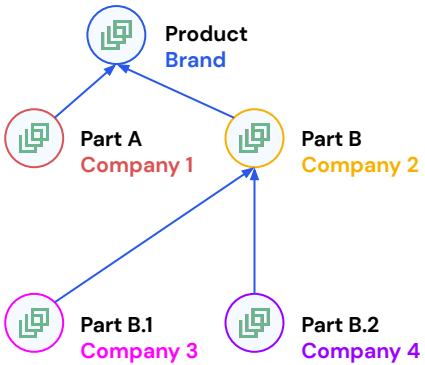
GRANULAR DATA DISCLOSURE

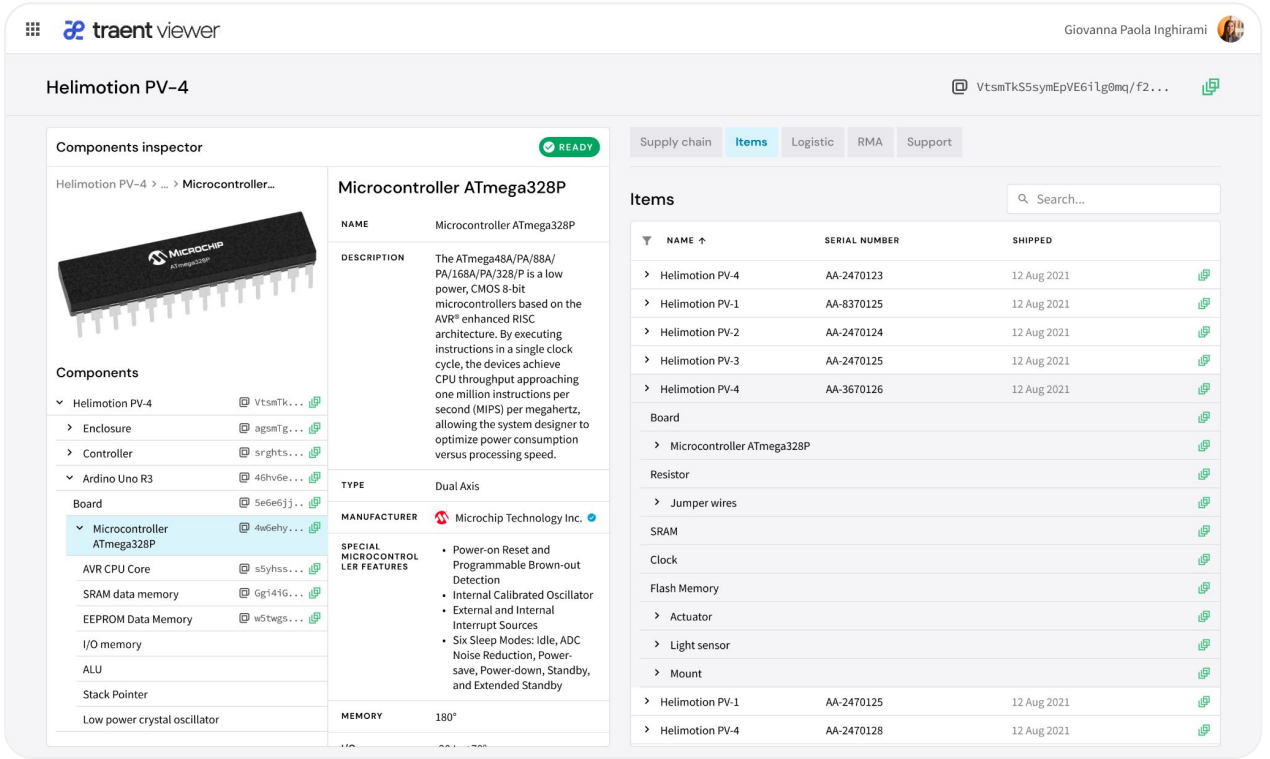
FULL DISCLOSURE



Data visualization

Each part, down from the raw materials, is linked up to the final product in a **linked tree of blockchains**. This allows maximum transparency over suppliers, sustainability and ethics.





traent

Thank you