



The Data value



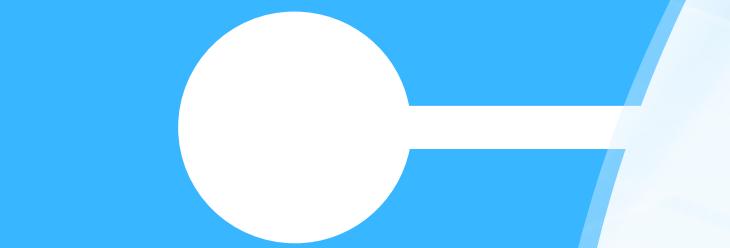
**Mattia Alfieri CTO
and Co-Founder - Apio**

About Us

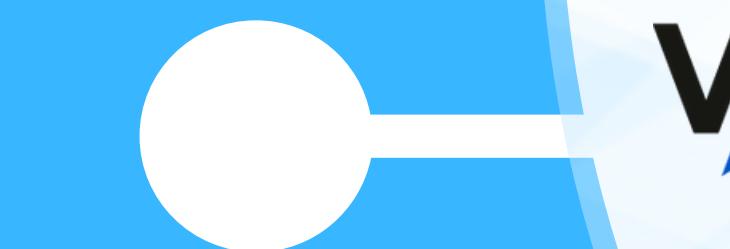
Apio is a Venture Builder Company and since 2014 we have been providing innovative digital solutions with a common objective: extract experience and insight from data.

Apio gained a deep know how in core technologies such as IoT, Artificial Intelligence and Blockchain, working with big italian and european companies.

Internet of Things



Cloud



Blockchain



a2a
energia

DE CECCO®
dal 1886

acea

enel

ENEA

VARGROUP
inspiring innovation

indra

DENSO

Sixtema
TINEXTA GROUP

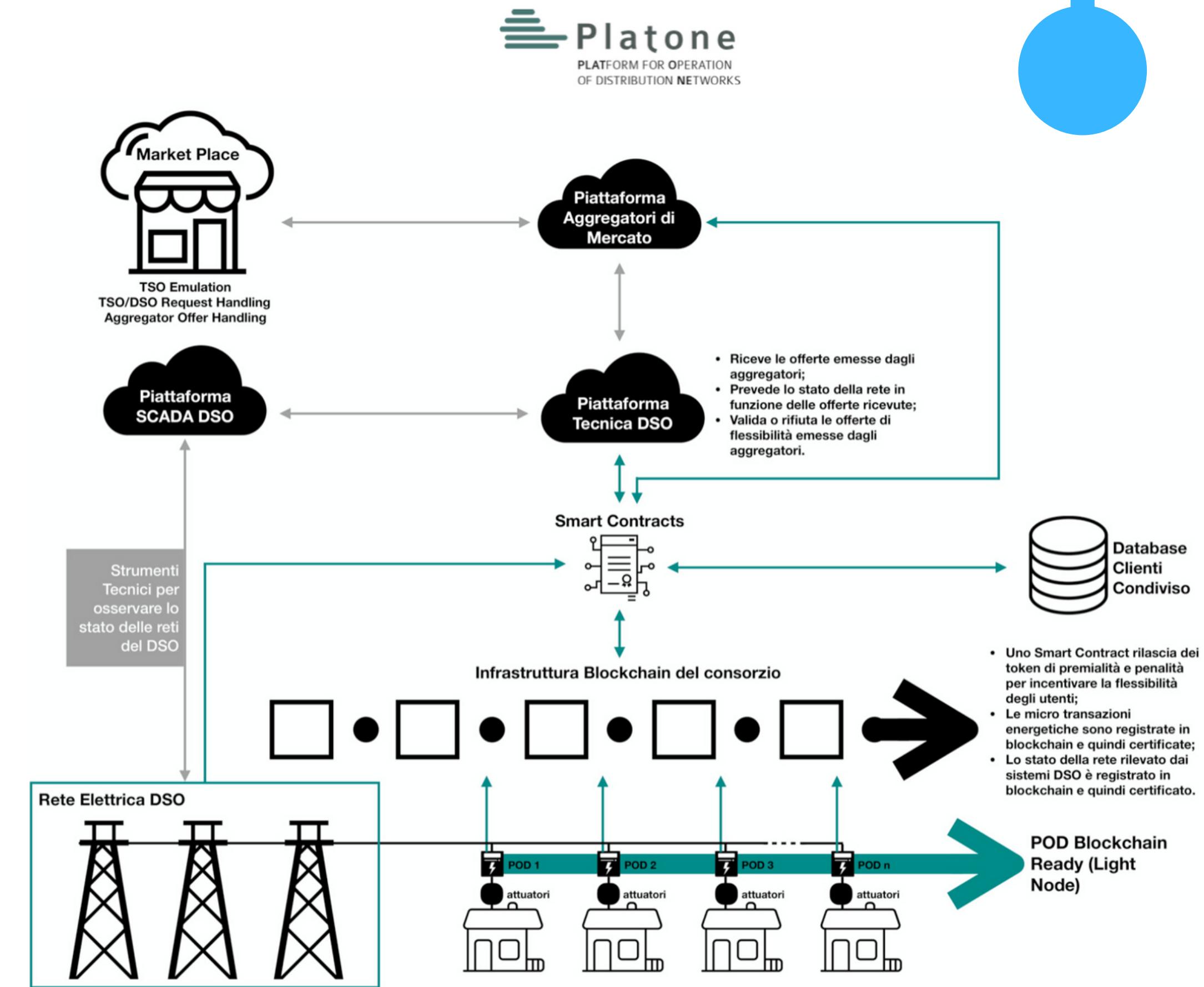
FATER

Use Case

Platform for Operation of Distribution Networks

Platone aims at defining new approaches to increase the observability of renewable energy resources and of the less predictable loads while exploiting their flexibility.

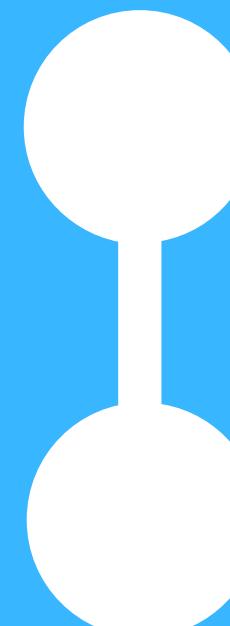
In the context of the project we provided the software that integrates the user device with the network.



Abstract - The problem

In the context of Demand Side management, there are some fundamental aspects:

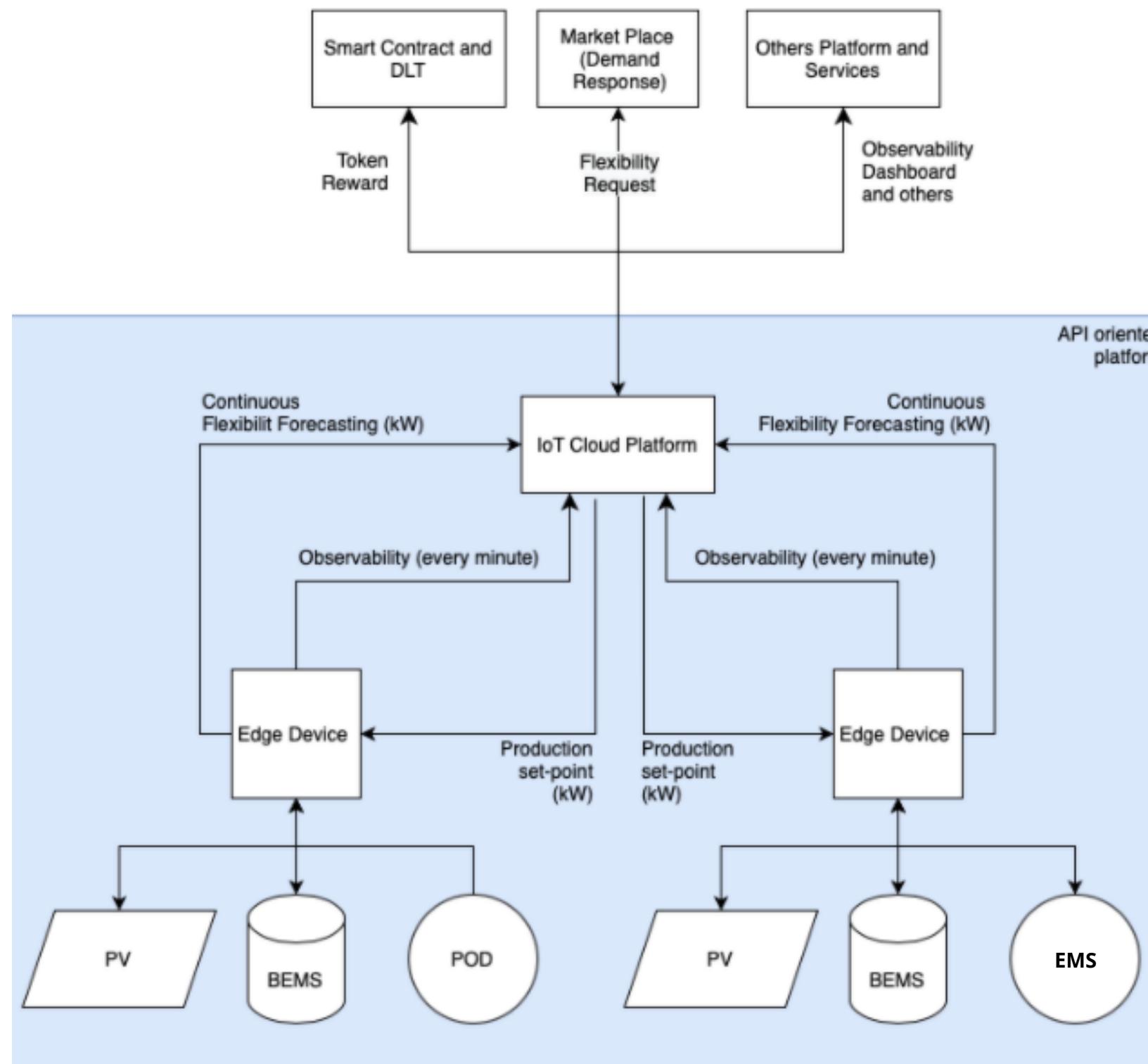
- Knowing the precise state of the network
- Forecast the amount of flexibility the network can offer
- Distribute the required flexibility among the nodes



A CENTRALIZED MANAGEMENT OF THIS INFORMATION DEDICATED TO INFER THE FLEXIBILITY OF EACH NODE OF THE NETWORK CAN LEAD TO SCALABILITY CHALLENGES



Solution



The main advantages of this approach are:

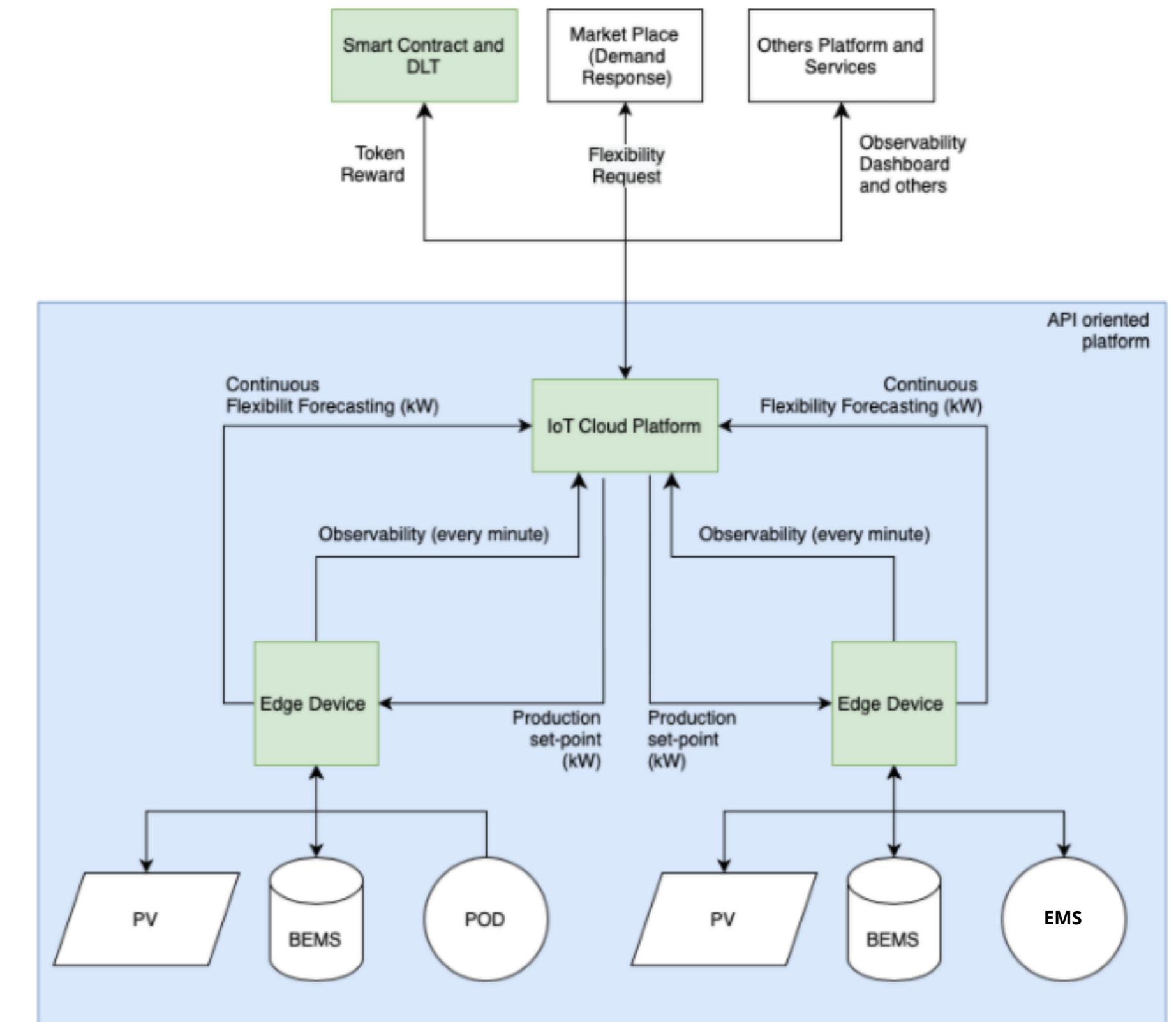
- **Distributed computation:** computational load is distributed over each node, working in synergy with the network
- **Distributed Business Rules:** Possibility to customize flexibility management business rules for group of nodes
- **Offline services:** edge computation enhance the service uptime (for instance, self-consumption can be sustained while disconnected from the network)

Application

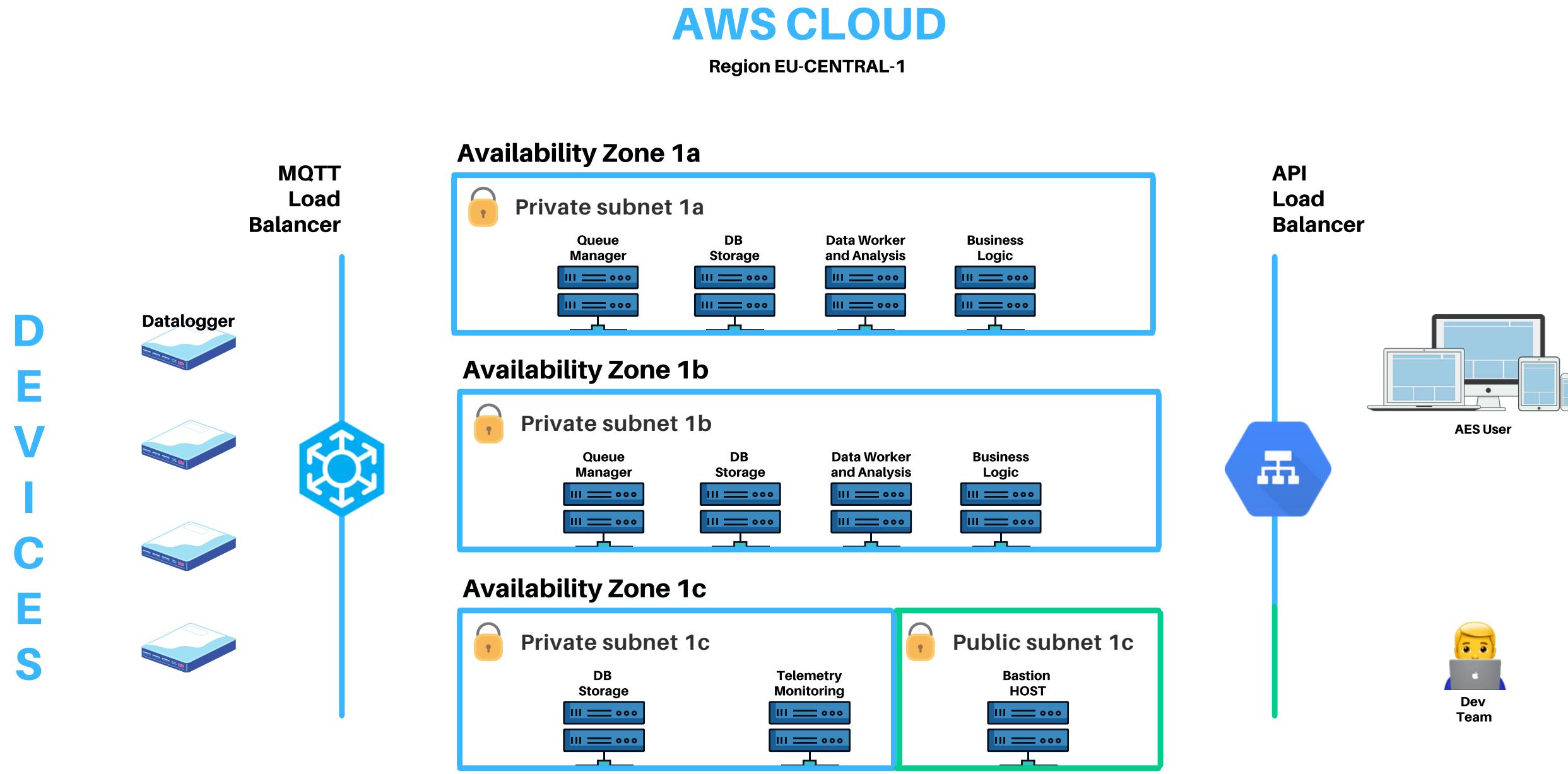
IoT Cloud Platform

EDGE Device Framework

Smart Contract Dev. and Deploy



IoT Cloud Platform



**Universal
Datalogger
Integrated**

**Real Time
data
Analysys**

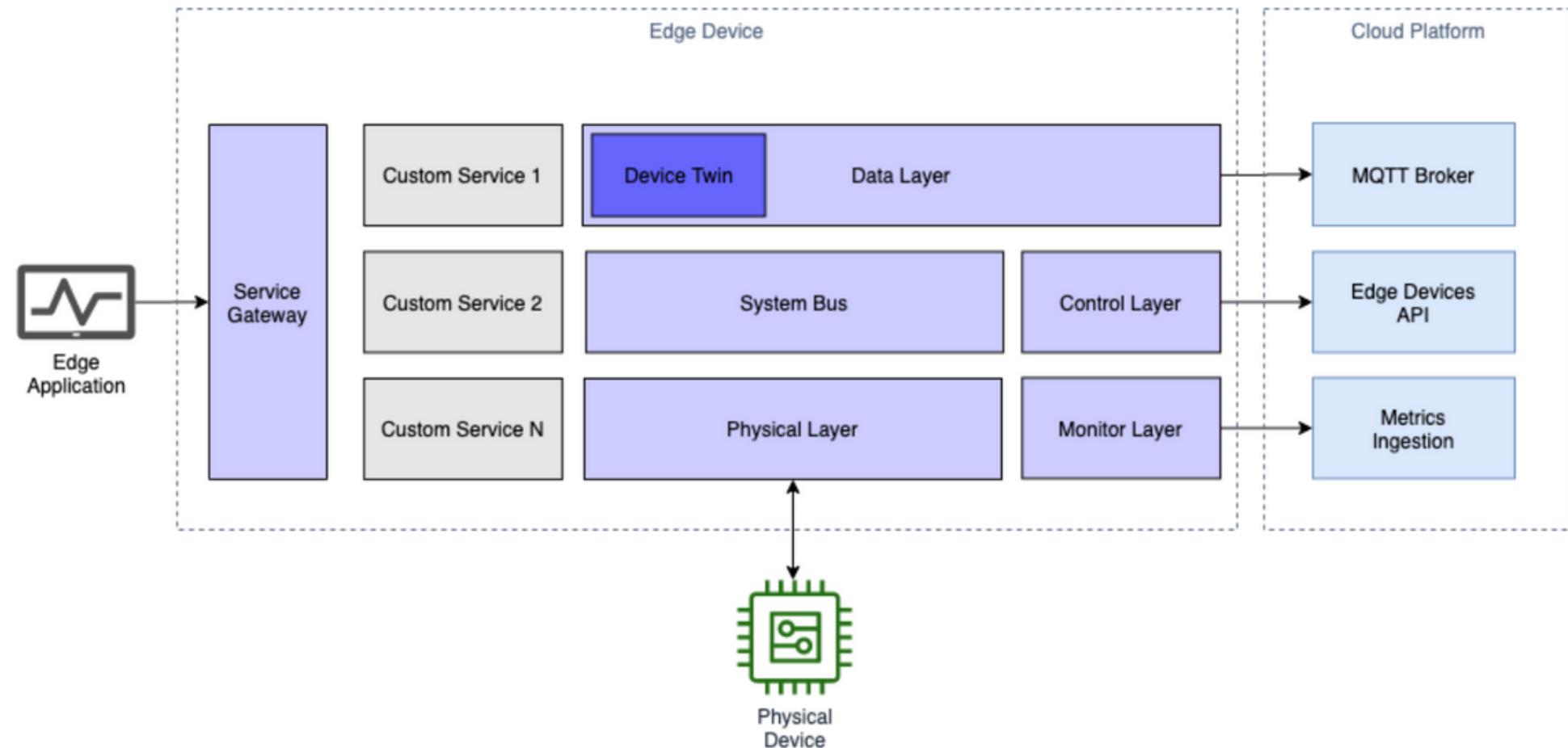
**Based
on API
RESTful**

**Management
Milions
Devices**

**Ready to
Machine
Learning**

**Multiple
Plant
Management**

EDGE Device Framework



Smart Contract

Digital
Currency



a2a
energia

FATER

Energy
Exchange



Notarization
Supply Chain



Digital Identity
DAO



IXELLION
The New Innovation Frontier



Thanks