Horizon and DEP projects: toward the European digital future

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# At a Glance: a Global Company

1.6 Bn€

**REVENUE** FY2022\*

**YEARS OF GROWTH** 

15,000~ **EMPLOYEES** 

70+

**OFFICES AROUND** THE WORLD

**GLOBAL HQ** ROME, ITALIY

**READ WHITE PAPER 30+ PROPRIETARY SOLUTIONS** FOR ALL MARKET SECTORS **OFFICES PROJECTS** 

**ADVISORY** 

**TECHNOLOGY & IMPLEMENTATION** 

**PROPRIETARY SOLUTIONS** 

**MANAGED SERVICES** 

RESEARCH & INNOVATION

**6** Development Labs 130+ Live Research Projects €40m+ Investments / YR **450+** Data Scientists and Researchers IT & MANAGEMENT ACADEMY

"ENRICO DELLA VALLE"

32,000 Man Days of Training / YR 1,300+ Professional Certifications **11,600+** Web Classroom Participants **ASSETS** 

**11** Portfolio Areas **70+** Group Companies **10+** Competence Center 3 Data Center Tier IV 22K Managed Servers 250K Workplaces Managed



### **Research & Innovation**

### **Exploring new methods and technologies to build and deliver** tomorrow's solutions.

We invest in R&I to support the continuous improvement of the whole organisation in increasing its competitive capacity and fulfilling the needs of a fluid, rapidly changing market. We are among the most active research companies in EU, attracting funds from national & EU research programs.

### **EMERGING TECHNOLOGY TRENDS**

We collaborate with the most important scientific realities and firstlevel industrial players. We maintain the leadership in the software research sector thanks to the coordination of numerous national and international projects in networks with scientific and university partners throughout Europe.

#### **EMERGING BUSINESS TRENDS**

We explore market trends to be always ready to welcome and face new challenges, in the areas of: Digital Industry, E-Health, Smart Energy & Utilities, Smart Government, Augmented City (with focus on Public Services & Smart Cities, Secure Societies, Smart Tourism & Culture, Smart Communities), Smart Agriculture, Smart Transportation, Digital Media & Communication.

#### **GLOBAL INNOVATION NETWORK**

We collaborate with important scientific realities and with first level industrial players.

- We are leaders in SW research coordinating several national and international projects.
- We play a strategic role in the international research community partnering with industrial, scientific & academic excellences



40 €m+ Investments / year



450+ Researchers



130+ Live Research **Projects** 



**500+ Research Projects** Done



Development labs

### **OUR INTERNATIONAL NETWORK**

























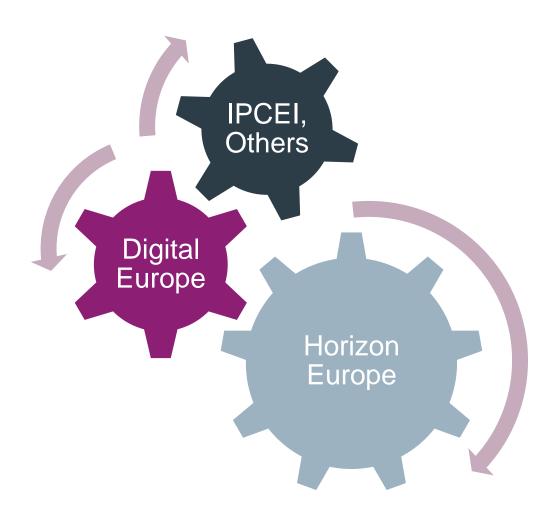








# **EC** supporting digital transformation across Europe





## Boosting EU R&I activities with the objective to:

- Implement the EU Data Strategy
- Focus on key technologies
- Support digital transformation
- Foster collaboration

### ICT4Health: data at the center







Telemedicine











Data Integration/ Interoperability







**Digital Therapeutics** 

Need for a common ground Digital Europe Projects are providing it!



# Digital Europe: Engineering participation to DEP: enhancing European digital capacity



A Distributed Open Marketplaces for Cloud and Edge Services in Europe



Boosting EU High Value
Datasets from Public
Sector



Pre-AI-Roadmap to build and consolidate the AI-on-demand platform



Decentralized registries and verifiable credentials



**Digital Europe**Strengthening EU digital capabilities



# DOME: A distributed open marketplace for Cloud & Edge services in Europe

A marketplace federating cloud, edge and data marketplace across Europe reliable marketplace.

#### **APPROACH**

Cloud computing is identified as a central piece of Europe's digital future, giving European businesses and public organisations the data processing technology required to support their digital transformation.

With the aim of fostering the adoption of cloud and edge services in Europe, DOME aims to create a dynamic ecosystem bringing together all key players, including infrastructure, data and platform providers, service integrators, certification agencies and customers from all sectors.

The objective is to boost the European cloud industry by simplifying current practices and offering customers a greater level of access and control.

#### **SOLUTION**

DOME provides a single access point for all interested parties, through which it provides an online catalogue of cloud-to-edge services based on common open standards in compliance with EU rule, standards and requirements. Each federated marketplace can be independent or linked to a specific cloud provider (laaS or cloud platform provider).

Engineering coordinates the project and contributes with a solution based on OSS (FIWARE BAE), also managing distributed identity, verifiable credentials, and the replication of offers on distributed ledgers, with the aim of providing a solid technological background for the creation of supplier ecosystems of services in the EU.

The project has received funding from Digital Europe Programme (DIGITAL), Call Cloud Data and TEF (DIGITAL-2021-CLOUD-AI-01), under project ID 101084071.

#### **RESULTS**

- European cloud&edge services core online marketplace
- Distributed Shared Catalogue and Transactions Ledger
- Distributed Identity management and Access Management (IAM).



#### **PROJECT VALUE**

- Innovation
- Visibility
- Cost cutting
- Process performance

#### **PROJECT TEAM**

- ENG-D.Hub
- Research & Innovation

#### **ENABLING TECHNOLOGIES**

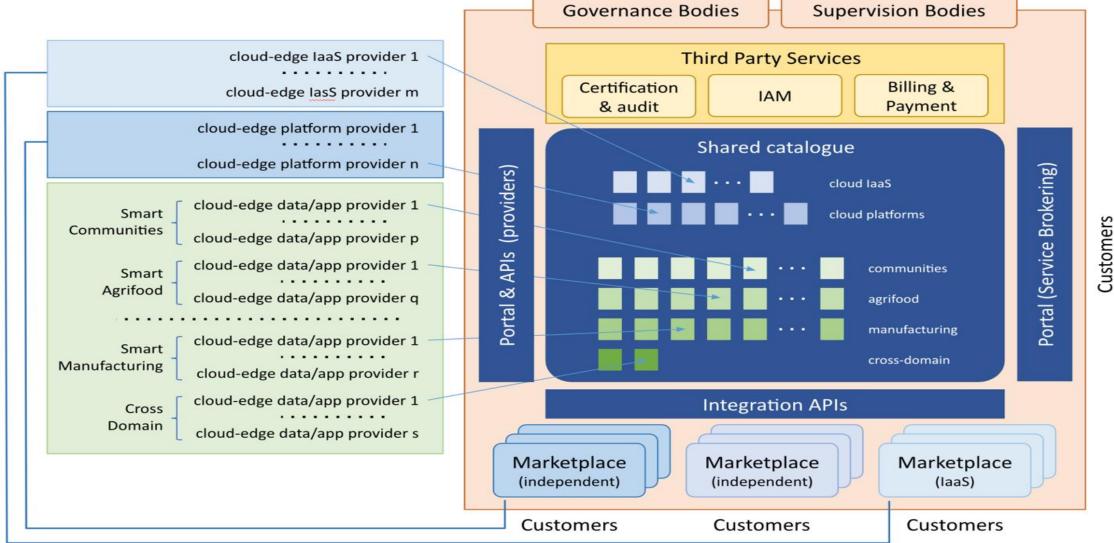
- Cloud.
- DI Ts
- Distributed databases

8

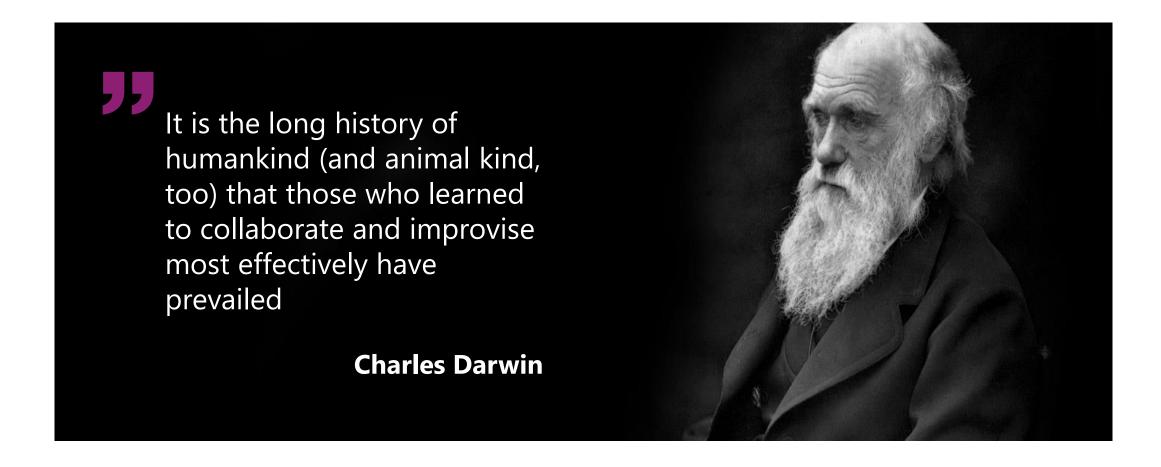
### **DOME** architecture

**ENGINEERING** / THE DIGITAL TRANSFORMATION COMPANY / R&I / DOME ARCHITECTURE





# **DEP projects: cooperate for compiting**





Thank you for your attention!



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# DOME: A Distributed Open Marketplaces for Cloud and Edge Services in Europe

The Commission stepped up its efforts to support cloud uptake in Europe as part of its strategy, notably with the pledge to facilitate "the setup of a cloud services marketplace for EU users from the private and public sector ..."

The DOME objective is to deploy and operate an EU online marketplace federating cloud and edge marketplaces. The marketplace should be the single point of access for trusted services, such as cloud and edge services, Data services and building blocks deployed under the Common Services Platform for Public Administrations.

### Key characteristics are:

- Open source/ready for creating new marketplaces;
- Suitable for selling whatever digital asset;
- Thought for simplify procurement and cluster digital offerings;
- Marketplace functions integrated with Gaia-X Federated Services;
- Identity and Access Management compatible with Gaia-X as trusted anchor;
- Ready for integrating with IPCEI-CIS outcomes.



### **DOME distinctive features**

- DOME introduces the concept of marketplace federation, meaning the ability to integrate existing marketplace services on top of a shared and decentralised catalogue of cloud and edge service descriptions following Gaia-X specifications;
- It is fully based on the integration of open standards for service marketplaces (TM Forum), data service catalogues (W3C - DCAT) and Decentralized / Self-Sovereign IAM (W3C - DID, VC/VP);
- Aligned with Gaia-X specifications for self-descriptions, trust anchor services;
- It runs on top of a **federation of blockchain networks** (starting with Alastria, Hasnet networks) aligned with the European Blockchain Service Infrastructure (EBSI);
- The approach in **DOME is open**, meaning that it is designed to allow incorporation of any kind of cloud platform and marketplace provider that agrees to align with the proposed standards.





