Building the Catalan EDIH: from isolated nodes to an integrated service approach

I2CAT-CATALONIA-Good Practice 2
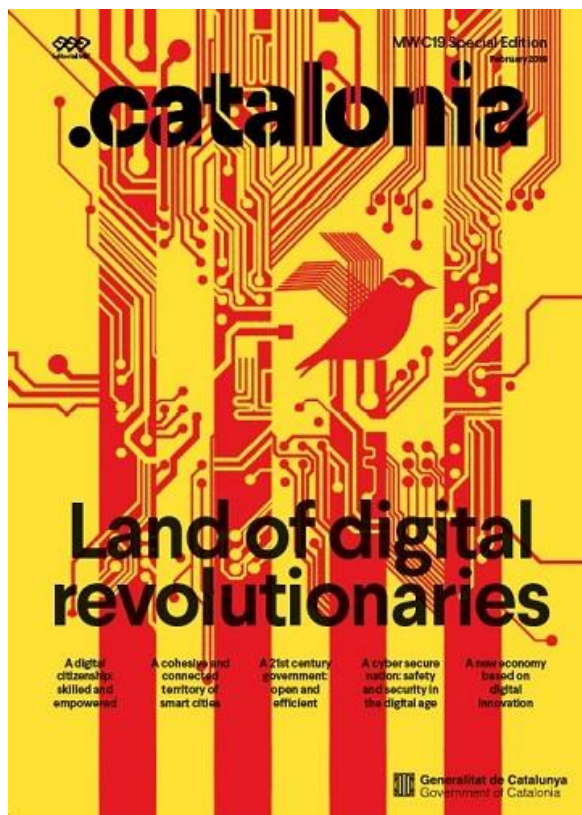
September 2020

DIGITAL CATALONIA Strategy

Digital policies as key for the Catalan society competitiveness

DIGITAL CITIZENS
An empowered, skilled and protected **digital citizenry**

DIGITAL INFRAESTRUCTURES
A **cohesive territory** of smart cities and digital infrastructure

DIGITAL GOVERNMENT
A **government and administration** of the 21st Century: open, digital and efficient

DIGITAL SECURITY
A **cyber secure nation**, that protects citizenry, the businesses and the institutions

DIGITAL ECONOMY
Digital innovation as the powerhouse of the new economy

FIVE PILLARS

DIGITAL CATALONIA Ecosystem
Different structures and players offering services and networking

SMARTY
Interreg Europe

> ## Catalonia is a world-class tech hub with unique scientific infrastructures and an extensive network of research centers

Extensive network of research centers

tecnio catalonia | ACCIÓ Generalitat de Catalunya

eurecat
Centre Tecnològic de Catalunya

LEiTAT
Technological Center

Institució CERCA
Centres de Recerca de Catalunya

UNIVERSITIES

CSIC
Consejo Superior de Investigaciones Científicas

HOSPITAL INSTITUTES

World-class scientific infrastructures

Mare Nostrum (BSC)
The Institute of Photonic Sciences
Biomedical Research Park
ALBA synchrotron
Institute of Chemical Research

Pro-business environment

- International Congresses (MWC, IOTWC ..)
- Incubators/Accelerators
- Cooperation and business support (industrial and sectorial associations, EEN)
- Strong Cluster Policy
- Government-led initiatives to support businesses
- Catalan government's agency for business competitiveness

A powerful industrial base and highly innovative companies

Barcelona is the 4th most innovative European city, *Innovation Cities Index 2019*

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DIGITAL CATALONIA Ecosystem

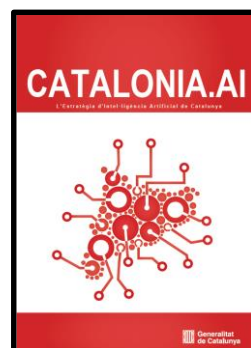**Different structures and players offering services and networking**

INDUSTRY 4.0
ALLIANCES & DIH

DIGITAL CATALONIA Actions
Working in coordination actions and specific growing instruments

COORDINATION ACTIONS TO IMPROVE PLAYER'S EFFICIENCY

- POSITION CATALONIA AT THE FOREFRONT OF THE USE AND DEVELOPMENT OF DIGITAL TECHNOLOGIES IN DIFFERENT ECONOMIC AND SOCIAL FIELDS.

- PROMOTE THE USE OF DIGITAL TECHNOLOGIES AMONG PUBLIC AUTHORITIES.

- BOOST TRAINING AND TALENT CREATION WITHIN THE USE AND DEVELOPMENT OF DIGITAL TECHNOLOGIES.

- PROMOTE RESEARCH AND INNOVATION IN DIGITAL TECHNOLOGIES AMONG R+D+I AGENTS, public authorities, companies, universities and the civil society.

- PROMOTE THE DEVELOPMENT OF A NEW INDUSTRY THAT REVOLVES AROUND THESE TECHNOLOGIES.

- RAISE THE AWARENESS AMONG CITIZENS OF THE POSSIBILITIES AND POTENTIALITIES OF DIGITAL TECHNOLOGIES, SO AS TO FACILITATE PARTICIPATION AND THE ADOPTION OF SAID TECHNOLOGIES.
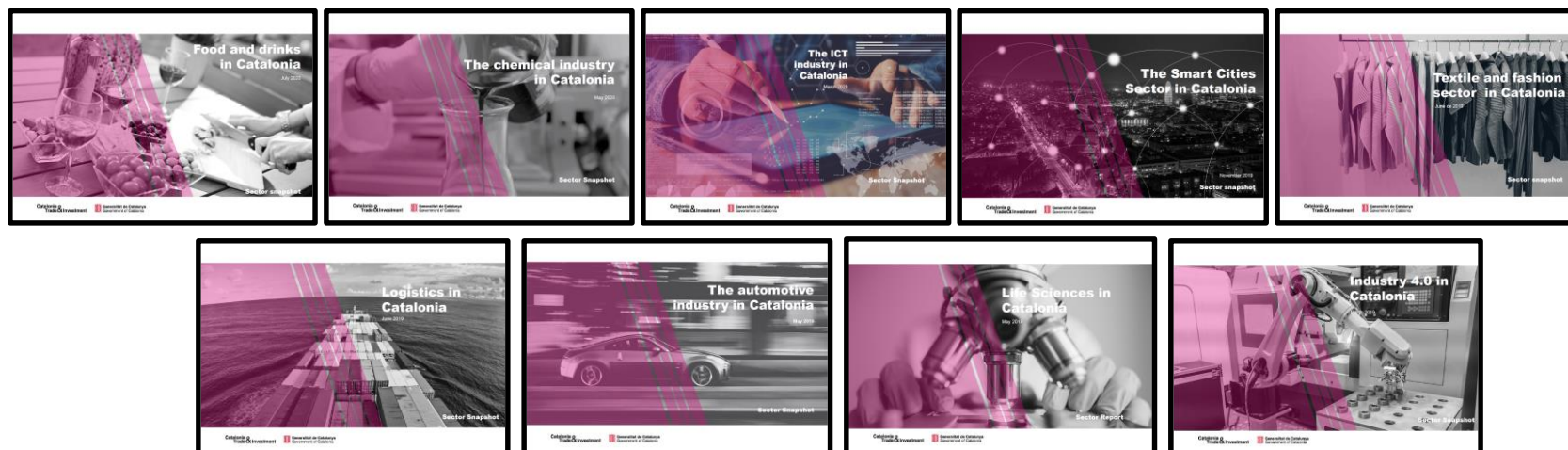
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DIGITAL CATALONIA Actions
Working in coordination actions and specific growing instruments

MAPPING OF TECHNOLOGY CAPACITIES AND SECTOR TECHNOLOGICAL NEEDS

- SUPPORT IN PARTNER SEARCHES AND TECHNOLOGY INCORPORATION.
- IDENTIFICATION OF BUSINESS OPPORTUNITIES.

DIGITAL CATALONIA Actions

Working in coordination actions and specific growing instruments

Fundació per la Indústria Sabadell – 1559

Foment del Treball Nacional

ProACCIÓ 4.0
Ajuts i serveis 4.0 per a pimes

#ProACCIÓ40

SUMA'T A LA REVOLUCIÓ DE LA TRANSFORMACIÓ TECNOLÒGICA!

Generalitat de Catalunya Departament d'Empresa i Coneixement

Consell General de Cambres de Catalunya

Enginyers Industrials de Catalunya

pimec Micro, petita i mitjana empresa de Catalunya

eurecat Centre Tecnològic de Catalunya

SPECIFIC PROGRAMME TO SUPPORT SMEs IN THE DIGITALISATION PROCESS

Promotion / Training	Strategic Analysis and Digital Transformation Diagnosis	Project implementation/ Ecosystem networking

Technological missions/ Fairs

Industry 4.0 use case publication

Industry 4.0 courses/ Marketplaces 4.0

4.0 diagnosis vouchers

Industry 4.0 specialised offer

Assessment services

Grants and funding

Specific funding instruments

Brokerage Events / Pitch Events

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Interreg Europe

DIGITAL CATALONIA Actions
Working in coordination actions and specific growing instruments

1000 SMEs to be technologically transformed 2019-2021

INNOTEC 4.0 PoC

Collaborative R+D projects for companies and public R+D centres

1.500.000 € (2019 call, 50)

1.500.000 € (2020 call)

50.000-200.000 €

25-75 % cofunding

ICF INDUSTRY 4.0 LOANS

Investment through the value chain and growth of the industrial activity

150.000.000 € (open call)

250.000 € (mín investment SME)

1.000.000 € (min investment BIG)

EURIBOR 12 month + 2 %

INDUSTRY 4.0 VOUCHERS

- Diagnosis (8.000 €)

- Implementation (20.000 €)

2.000.000 € (2019 call, 150 SMEs)

2.000.000 € (2020 call)

Accredited assessment service
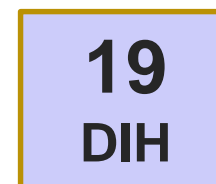
DIGITAL EUROPE PROGRAMME
Big opportunity to improve digital coordination in Catalonia

Beyond 2020, DIHs should focus on priority technologies in the digital transformation (AI, cybersecurity, HPC) for EU while empowering main sectors of the regional economy and society

*"European Digital Innovation Hubs (EDIH) will play a central role in the Digital Europe Programme to stimulate the broad uptake of **Artificial Intelligence, High Performance Computing (HPC) and Cybersecurity** as well as other digital technologies by **industry (in particular SMEs and midcaps) and public sector organisation**s in Europe"*

*"While EDIHs are free to define their organisation, composition, and governance structure, they should cover at least the **technology side and the business development side**, and be capable of doing effective outreach. They should also have appropriate links to companies and/or public sector organisations. **At the core of the EDIH, there is normally a research & technology organisation (RTO) or university lab offering technology services."***
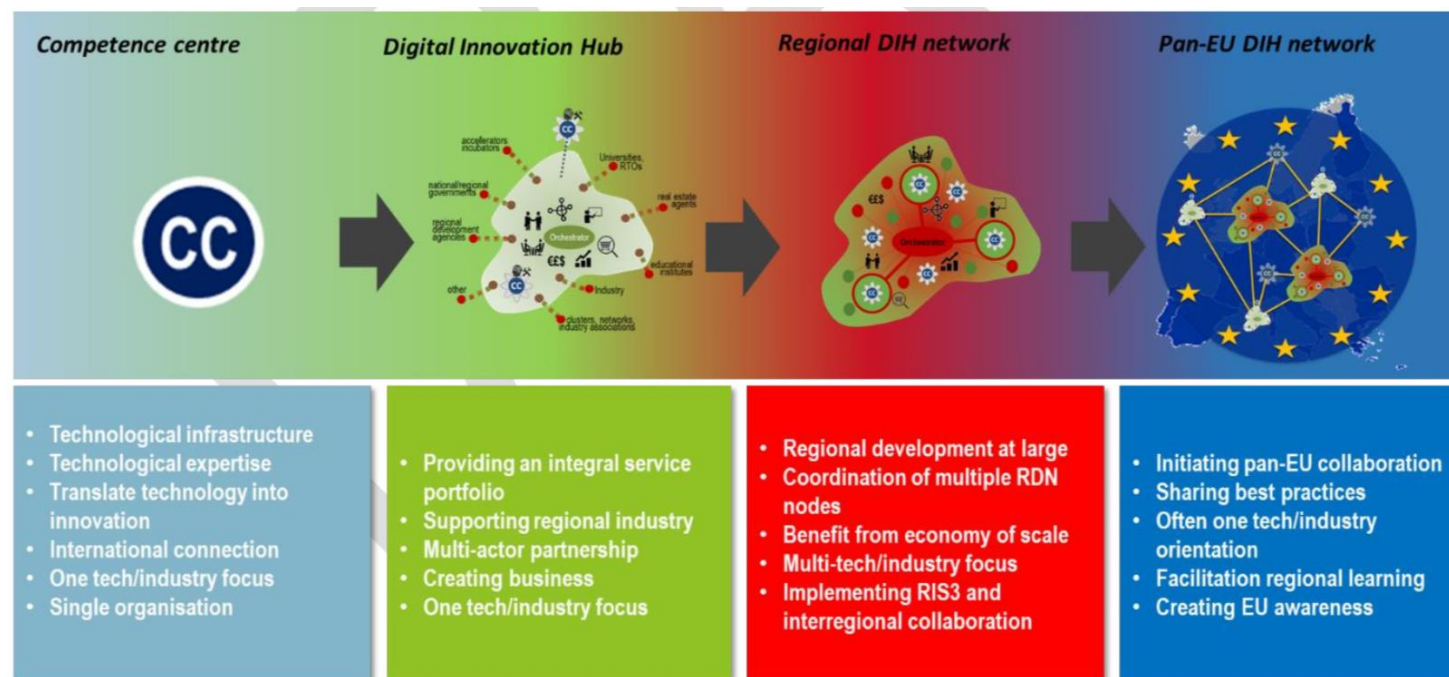
*"…**not all hubs will have the same focus**, but that they complement each other across Europe (…) Hubs are not confined to a regional scope, they should aim at national, European or even world-wide customers. However, they should **ensure that they are a first contact point for the local industry and public sector**..."*

EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR COMMUNICATIONS NETWORKS, CONTENT AND TECHNOLOGY

Artificial Intelligence and Digital Industry
Technologies and Systems for Digitising Industry

European Digital Innovation Hubs in Digital Europe Programme

Draft working document
05-05-2020

Type the first subtitle here.

Disclaimer: This is a document to prepare the implementation of European Digital Innovation Hubs in Digital Europe Programme. It is based on the draft Digital Europe Programme regulation and 4 meetings with Member State representatives where these ideas where discussed. It has also been validated with other stakeholders during the 3rd Stakeholder Forum on Digitising European Industry "Artificial Intelligence and Digital Innovation Hubs – beyond 2020", which took place on 13-15 November 2019 in Madrid. The Digital Europe Programme is subject to approval by the European Parliament and the Council.

This is the last major update of the document. It will stay in "draft" status, and only factual errors will be corrected. The final version of these ideas will be published in the Expression of Interest that will be directed towards the Member States and the Workprogramme of Digital Europe Programme that is under development.

The European Commission cannot be held liable for any of the views expressed in this document.

Commission européenne/Europese Commissie, 1049 Bruxelles/Brussel, BELGIQUE/BELGIË - Tel. +32 22991111

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DIH

2020

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DIGITAL EUROPE PROGRAMME
Big opportunity to improve digital coordination in Catalonia

Evolution of the DIH concept

*"…a DIH is seen as the core mechanism to create a **strong, collaborative regional innovation ecosystem** where all innovation partners are working together to support SMEs in a specific digital technology…"*

*"The Regional DIH networks (RDN) can be seen as a "supra-DIH", **coordinating several industry/technology area oriented RDN-nodes**. (…) The RDNs become the one-stop-shop in the region, **facilitating the connection for the nodes** to the services they do not provide."*

DIH4CAT
The European Digital Innovation Hub for Catalonia

DIH4CAT brings together, orchestrates and completes Catalonia's main players and infrastructures for digital transformation in order to leverage Catalan SMEs (and Government) digital maturity and competitivity.

DIH4CAT is **a non-profit regional ecosystem** that integrates the main agents involved in the digital transformation in Catalonia.
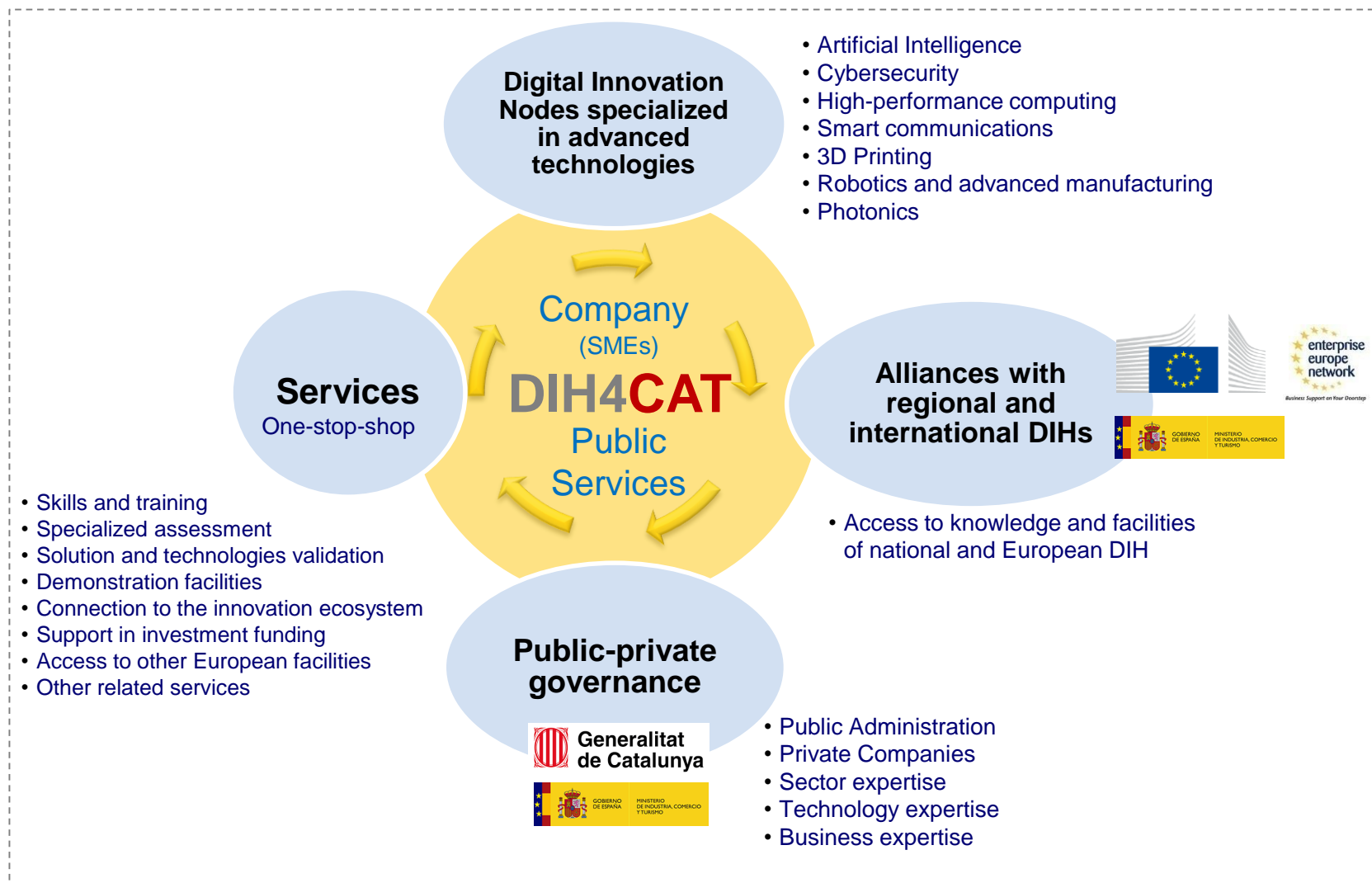
Our **vision is to move forward to a new prosperous productive model, reliable and sustainable**, helping SMEs to became *Companies of the Future*:
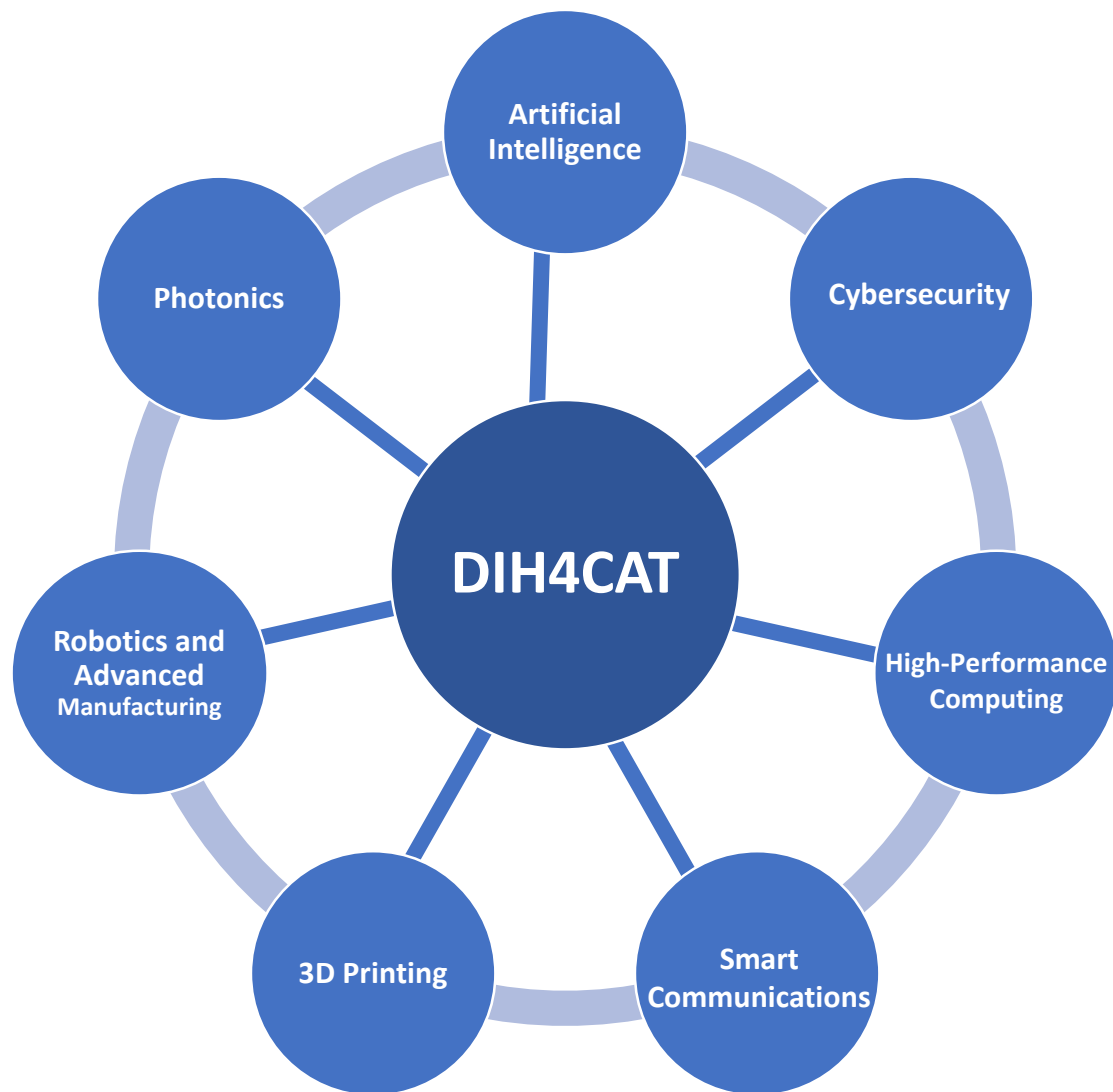- Digitized and Connected
- Sustainable (Circular Economy)
- Healthy and integraded (Social, Health and social responsibility)

DIH4CAT is a **coordinated network of 7 digital innovation nodes** that reflect the world-class technological capabilities available in Catalonia and that have relevant volume and demand.

Each node is coordinated by an RTO or University and includes in its structure other relevant actors to offer a complete portfolio of services (technological and business side).

DIH4CAT is lead by the Government of Catalonia to guarantee neutrality and best class service for the SMEs, as well as to connect the services of the DIH with relevant innovation players at regional and international level (EEN, EDIHs, investors..).

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The European Digital Innovation Hub for Catalonia

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Digital Innovation Nodes specialized in advanced technologies

- Artificial Intelligence
- Cybersecurity
- High-performance computing
- Smart communications
- 3D Printing
- Robotics and advanced manufacturing
- Photonics

Company (SMEs)

DIH4CAT

Public Services

Services
One-stop-shop

- Skills and training
- Specialized assessment
- Solution and technologies validation
- Demonstration facilities
- Connection to the innovation ecosystem
- Support in investment funding
- Access to other European facilities
- Other related services

Alliances with regional and international DIHs

enterprise europe network
Business Support on Your Doorstep

GOBIERNO DE ESPAÑA — MINISTERIO DE INDUSTRIA, COMERCIO Y TURISMO

- Access to knowledge and facilities of national and European DIH

Public-private governance

Generalitat de Catalunya

GOBIERNO DE ESPAÑA — MINISTERIO DE INDUSTRIA, COMERCIO Y TURISMO

- Public Administration
- Private Companies
- Sector expertise
- Technology expertise
- Business expertise

DIH4CAT
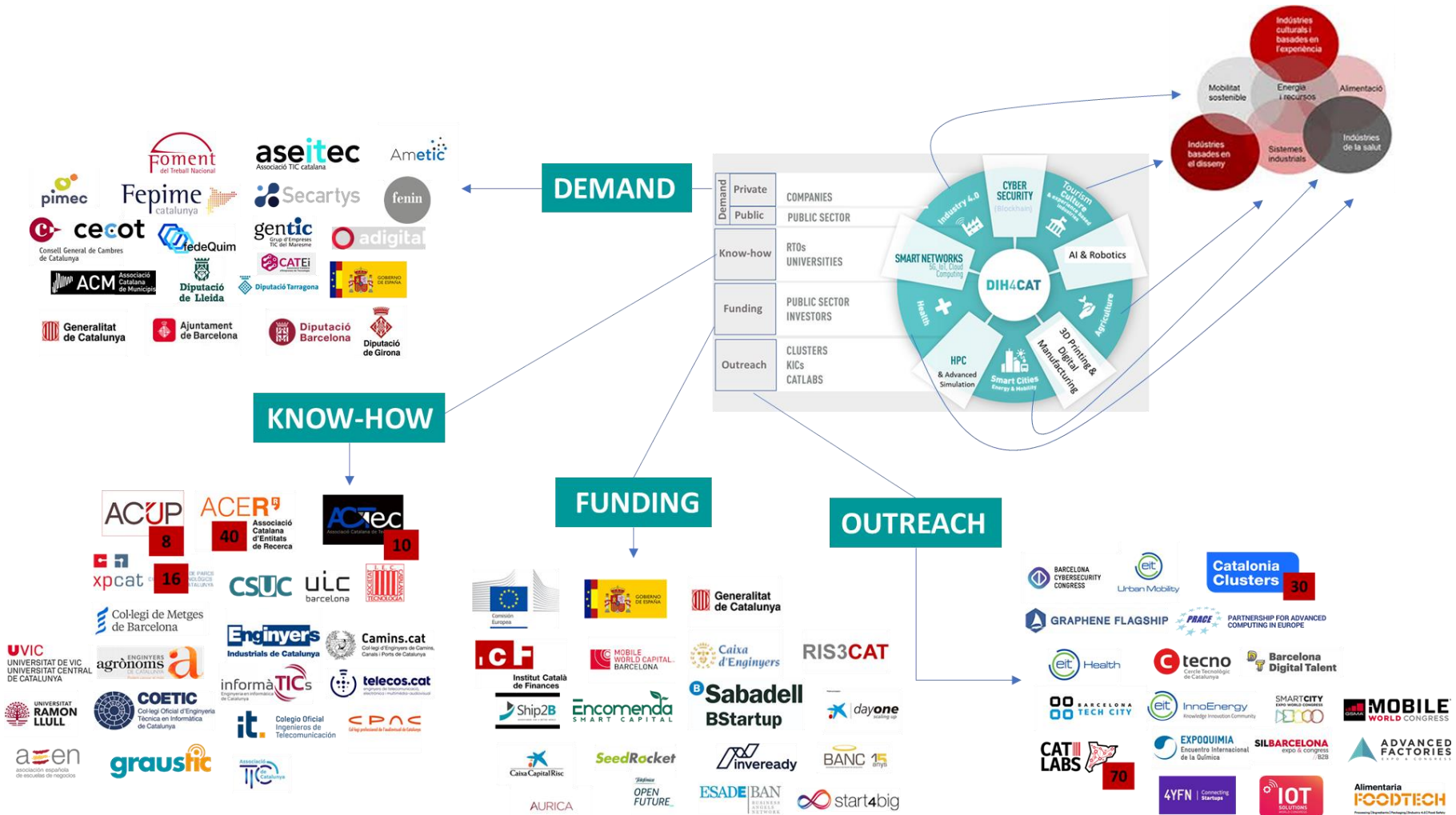## The European Digital Innovation Hub for Catalonia

From needs to solutions

DIH4CAT is not only focused in offering advanced technologies to companies and public bodies, so it profits all previous experience form existing organizations to offer services oriented to satisfy needs and challenges previously identified by users. These services must be related to an specific knowledge area, to the combination of different digital technologies or to non-technological solutions needed to achieve the challenge.

DIH4CAT
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DIH4CAT

One-stop-shop

Company of Public Body Digital Need

Virtual Tool

Information and Orientation

Diagnosis and Assessment

Skills and Training

Connection with Innovation

Support to Funding search

Digital innovation nodes
- Access to specialized knowledge
- Solutions and technology validation
- Testing facilities
- Solutions to technology challenges
- Portfolio of technologies
- R+D+I Collaborative projects

Marketplace
of capacities and solutions technological and non-technological

Grants and funding
public and private
(regional and national)

European DIHs

European Marketplace

European Funding

Digitalized Company

Digitalized Public Body

DIH4CAT
The European Digital Innovation Hub for Catalonia

Main Services of DIHs

SERVICES YOU GET IN
DIGITAL INNOVATION HUBS

1 AWARENESS & DIAGNOSIS

Get the latest information of the possibilities that digital transformation can open to your business. You may attend events, do benchmarking or go through a diagnosis process.

2 TRANSFORMATION PLAN

Perform an in-depth audit and define a transformation plan with concrete milestones and outcomes for your business through the support of experts.

3 TRAINING

Get the latest advanced digital skills through trainings, digital boost-camps, and traineeships.

4 PROTOTYPE & TEST

DIHs enable any business to test and experiment with digital innovations relevant to its products, processes or business models.Transform your digital opportunities into a physical form so that you can experience and interact with them and, in the process, learn and understand how they can add real value and be useful for your business.
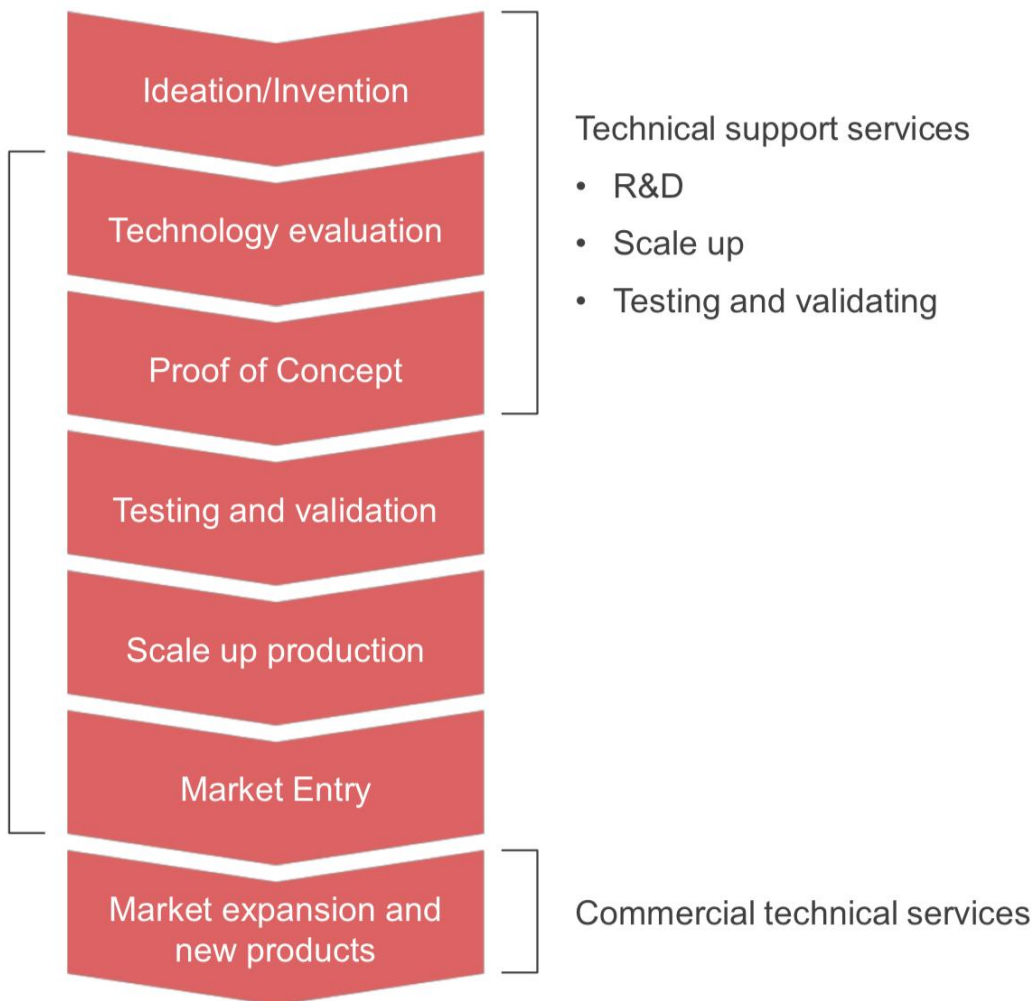
5 NETWORK FOR GROWTH & FINANCE

DIHs facilitate links between users and suppliers of digital innovations across the value chain. DIHs provide connections with training providers, investors and facilitate access to finance digital transformation.

The European Digital Innovation Hub for Catalonia

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Ecosystem support services take place **along the entire** commercialisation process

Business support services

- Raising Capital
- Education and training
- Incubation/acceleration

Innovation Services of DIHs

Ideation/Invention

Technology evaluation

Proof of Concept

Testing and validation

Scale up production

Market Entry

Market expansion and new products

Technical support services

- R&D
- Scale up
- Testing and validating

Commercial technical services

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DIH4CAT
The European Digital Innovation Hub for Catalonia

Pillar	Activities	DIH	DIH4CAT Best practices to transfer to the DIH	Services to clients or DIH
Ecosystem	One-stop-shop			X
	Ecosystem building, scouting, brokerage, networking Collaborative Research			X
	Networking with Associations, Clusters			X
	Networking with SMEs	X		
	Events related to sectors, cross-cutting, broading coverage			X
	Events related to specific technologies	X		
	Catalogue of services & assets	X	X	X
	Territory Diagnostic			X
	Dissemination Material		X	
	Awareness creation			X
Technology	Concept validation and prototyping	X		
	Testing and validation	X		
	Incubator support	X		
	Pre-competitive series production	X		
	Contract Research	X	X	
	Knowledge Transfer Partnerships	X	X	
Business	Business Models		X	
	Funding for DIHs	X		
	Technology Commercialisation	X	X	
	Market intelligence of sectors			X
	Market intelligence of technologies	X		
	Commercial infrastructure			X
	Visioning and Strategy Development for Businesses	X	X	
	Access to Funding and Investor Readiness Services			X
	Voice of the customer, product consortia	X	X	
	Mentoring	X	X	
	Digital Maturity Assessment	X	X	
	Consultancy	X	X	
	Accelerator support	X	X	
Skills	Education and skills development	X	X	
	Training the traineers			X

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The European Digital Innovation Hub for Catalonia

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Thank you for your attention!

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