CPS Summer School

IoT, a key asset for Digital Transformation

Nuria de Lama
European Programs Manager, Atos
Board of Directors, Big Data Value Association

23-09-2019

Atos

ATOS in a nutshell

Atos is a leader in digital services delivering Systems Integration services, Consulting, Managed Services & BPO, Cloud operations, Big Data & Cyber-security solutions as well as e-payments and transactional services.
Atos is focused on business technology that powers progress and helps organizations to create their firm of the future.

€ 12 **billion annual revenue *circa***

Atos operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, Unify and Worldline.

Atos is a Societas europaea (SE).

100,000 **business technologists *circa***

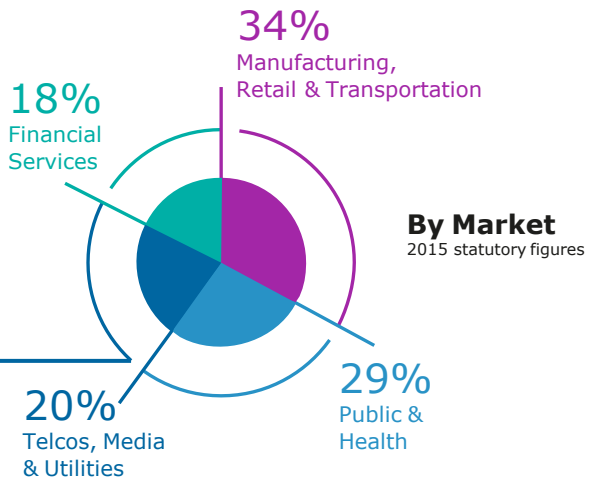
Atos is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and is listed on the Euronext Paris market.

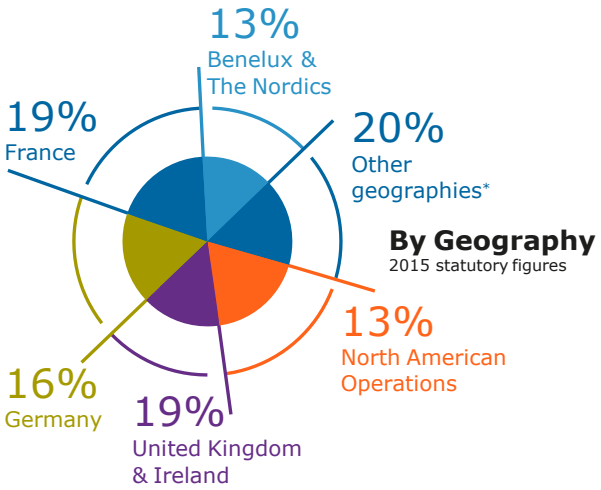
72 **countries around the world**

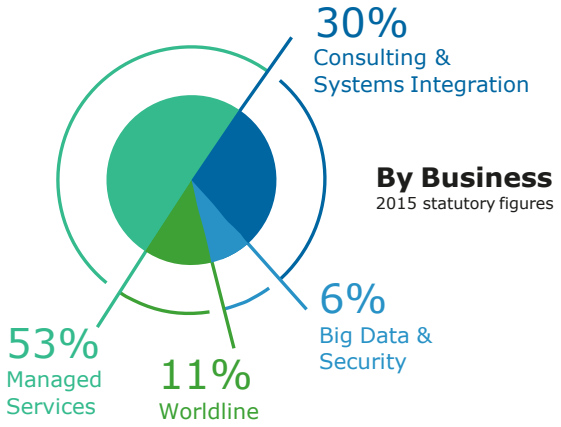
Atos

Key figures:
a well-balanced positioning

Breakdown of revenue in 2015 (in percentage)







* including Iberia, Central & Eastern Europe, Asia Pacific, India, Middle East & Africa, South America, as well as Major Events and Cloud & Enterprise Software

Overview of contents

- Momentum around Digital Transformation
- IoT in the context of Digital Platforms
- The challenge of Data Sharing
- Data as key element for Artificial Intelligence
  - European Position and Strategy in AI
  - Towards an AI Public-Private-Partnership
- Opportunities…for you
- Q&A

Momentum around Digital Transformation

A bit of brainstorming…

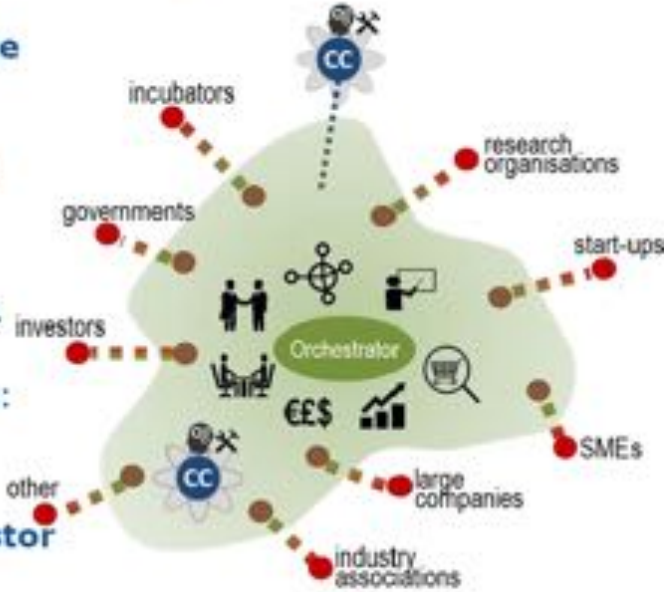
- The Platform economy and multi-sided markets
- The relevance of Digital Single Market to scale and create critical mass
- Digital autonomy and sovereignty
- Synergies accross sectors
- User acceptance

DEI: Digitizing EU Industry

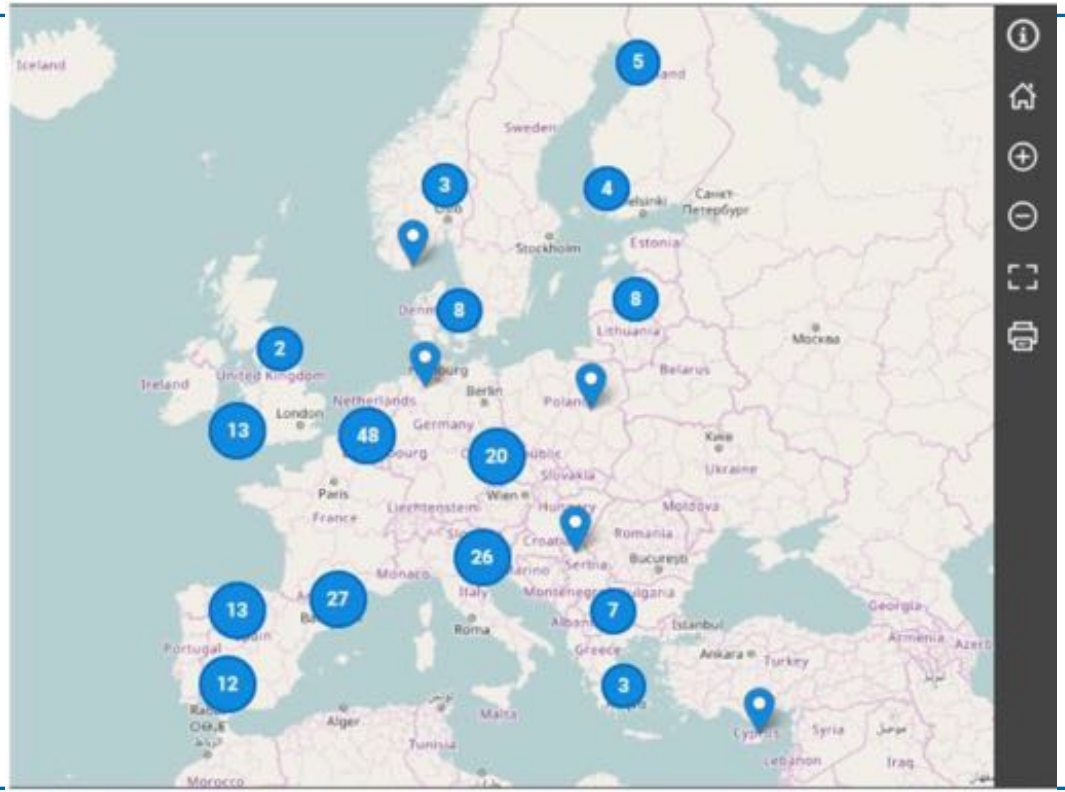
DEI. Digital Innovation Hubs; concept

A one-stop-shop providing services to companies in the region through a multi-partner cooperation:

- Access to Specialist Expertise and Infrastructure
- Brokering/matchmaking
- Awareness Creation around Digital Technologies
- Innovation Scouting
- Digital Maturity Assessment.
- Visioning and Strategy Development for Businesses:
- Mentoring
- Training
- Access to Funding and Investor Readiness Services



DEI. Digital Innovation Hubs; landscape



IoT in the context of Digital Platforms

Driving forces; success factors of the IoT market

IoT platforms as enablers

Security, data protection and privacy

Transparency in the IoT value chain

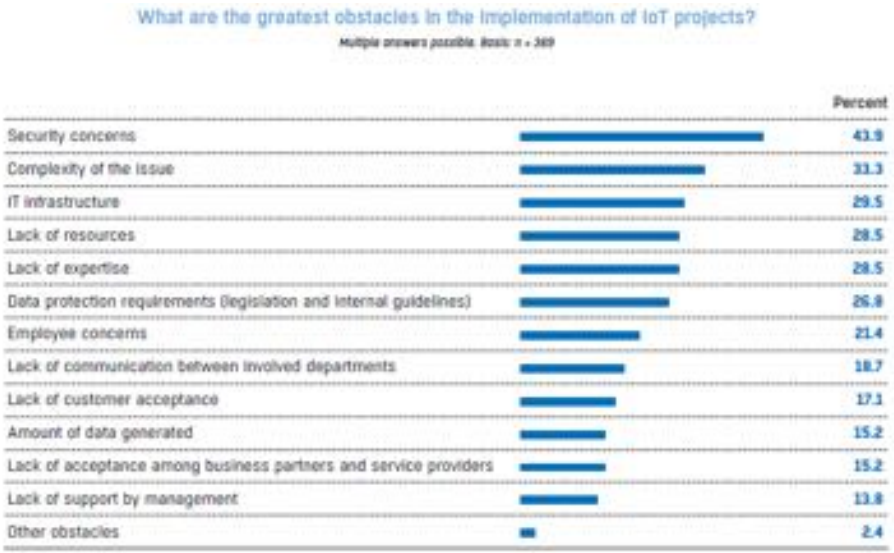
The challenge of skills

Need for compelling RoI examples

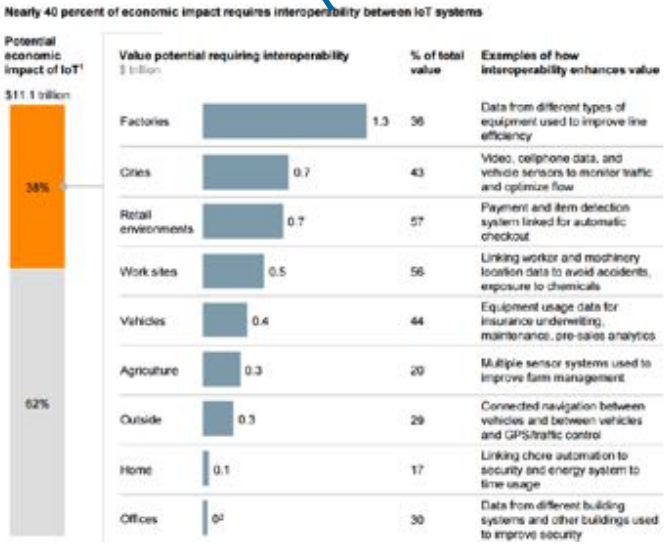
Openness and Data monetization

Regulation

Interoperability and standards



Source: IDG



Source: McKinsey

Landscape of IoT platform suppliers

- **More than 500 IoT platforms** in the market!
- Building blocks/functionalities: Connectivity services, Device management, Vertical-specific end-to-end IoT stacks, Managed services to host, Cloud backend and IaaS, application enablement (marketplace), Big Data/advanced analytics, security components

Cisco Kinetic for Cities

Cisco kinetic for Cities is a single pane of glass which allows you to view and manage data from the lightning, parking, traffic, waste management, and Wi-Fi deployments around the city.

CITYBEACON

As cities get smarter, the fragmentation of connectivity solutions and platforms is a growing problem for local authorities, who need a single platform to communicate with citizens and businesses, and to improve local services.

Huawei Smart City Nervous System

Our City Intelligent Operation Centre solution is the "brain" that centralizes and coordinates city management, and its City Internet of Things, the "peripheral nerves" that connect, sense and send city information to the "brain".

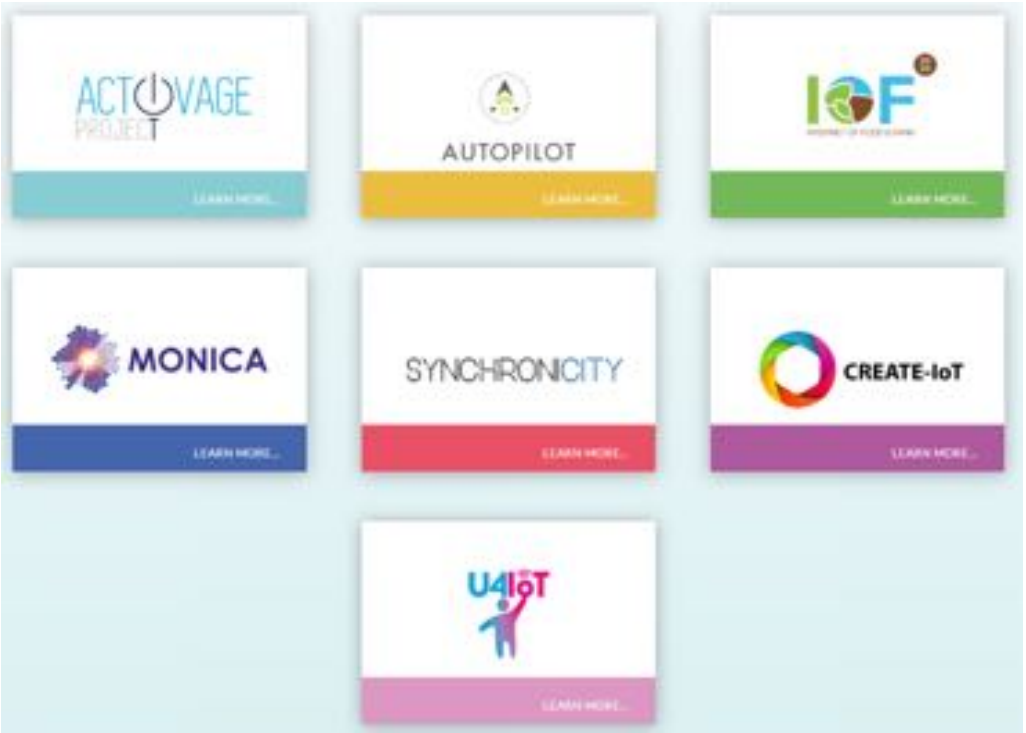
SAP S4/HANA and Philips CityTouch

We are delivering on our vision for smarter cities by harnessing the Internet of Things and integrating data from connected street lights with data from other city ERM systems in a single integrated dashboard.

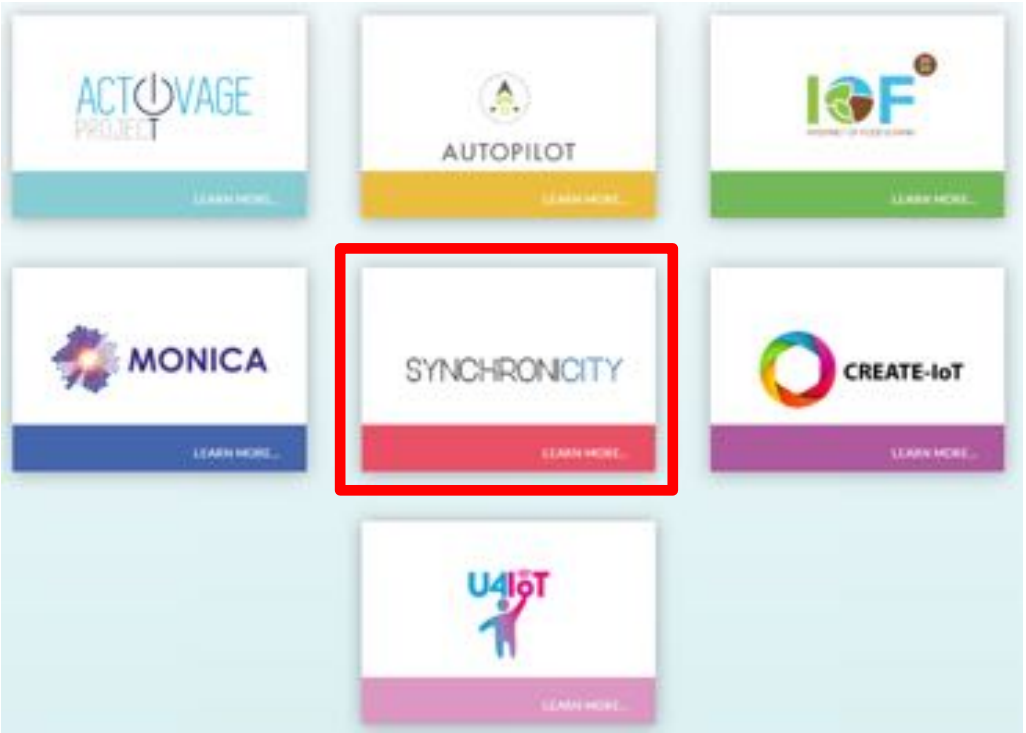
Reflections…

- Vendor **Lock-in**
- Availability of Data (closed vs Open Data, data ownership, data sharing), data **monetization**, data silos
- What success can we expect from **marketplaces**?
- Data is nothing if not transformed into knowledge
- The **Platform economy** and **multi-sided markets** (beyond pure IoT technology…)
- Infrastructure, data management, nurtuting the ecosystem…Finally, **who pays for what**?

European IoT Large Scale Pilots Program



European IoT Large Scale Pilots Program



Deliver a market for IoT-enabled urban services for Europe and beyond

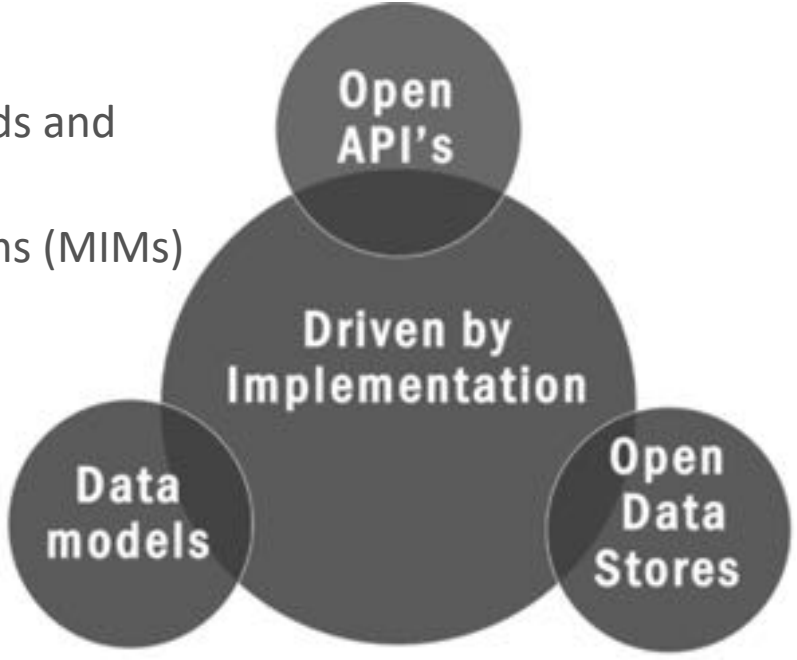
“A robust model for standards-based innovation and procurement of IoT-enabled services across domains

Translated into (more detailed) Objectives

1. Establish technical foundations
2. Establish marketplace enablers
3. Create reference zones
4. Pilot services that serve citizen needs
5. Establish ecosystem
6. Establish citizen-oriented methods
7. Establish holistic quantification of value
8. Provide insights into new business models
9. Transform city policy-making and planning

Common Technical Ground

1. **OASC** neutral branding (based on standards and consensus specifications)
2. **OASC** Minimal Interoperability Mechanisms (MIMs)
   - Context Information Management
   - Common data models
   - Ecosystem Transaction Management (marketplaces)
3. **SynchroniCity** reference implementation (standards-based)
4. **SynchroniCity** cloud hosting (option)



Interoperability Mechanisms

Interoperability Point	Description	Specification document	Related Standards [and Baselines]
Context Management API	This API allow to access to real-time context information from the different cities.	Reference Architecture for IoT Enabled Smart Cities (D2.1)	ETSI NGSI-LD prelim API, OMA NGSI, ITU-T SG20*/FG-DPM*
Shared data models	Guidelines and catalogue of common data models in different verticals to enable interoperability for applications and systems among different cities	Guidelines for the definition of OASC Shared Data Models (D2.2) Catalogue of OASC Shared Data Models for Smart City domains (D2.3)	[SynchroniCity RZ + partner data models]
Ecosystem Transaction Management ("Marketplace") API	It exposes functionalities such as catalog management, ordering management, revenue management, SLA, license management etc.	Basic Data Marketplace Enablers (D2.4) Guidelines for the integration of IoT devices in OASC compliant platforms (D2.6)	[TM Forum API]
Security API	API to register and authenticate user and applications in order to access to the SynchroniCity-enabled services.	Reference Architecture for IoT Enabled Smart Cities (D2.1)	OAUTH2
Data Storage API	This API allows to access to historical data and open data of the reference zones.	Reference Architecture for IoT Enabled Smart Cities (D2.1)	ETSI NGSI-LD, DCAT-AP [CKAN]

Atomic Services are a good opportunity to test the SynchroniCity framework and OASC principles. They could be easily replicated, accelerating new developments, in many cities which provide and implement these principles.

City Agnostic

Replicable

Easy Deployment

Internal Use Cases

Human Centric Traffic Management

Multi-Modal Transportation

Community Policy Suite

Challenges (technical & non-technical)

Demand-side:

- Choice, flexibility, efficiency, value-for-money, independence, economic development

Supply-side:

- Scale, agile development/deployment

All:

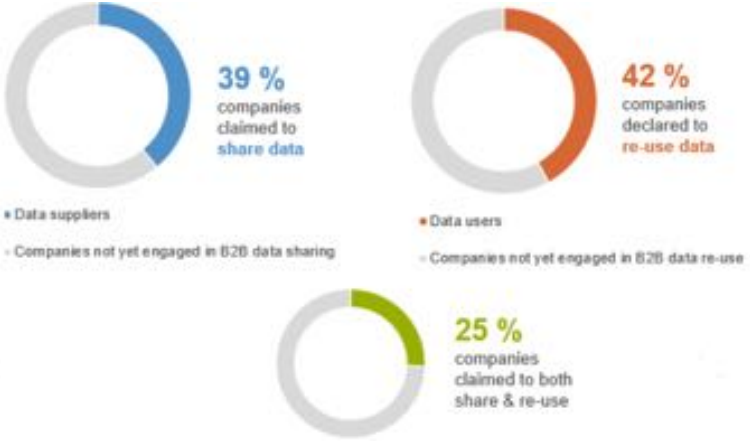
- Reduced risk, increased investments, innovation

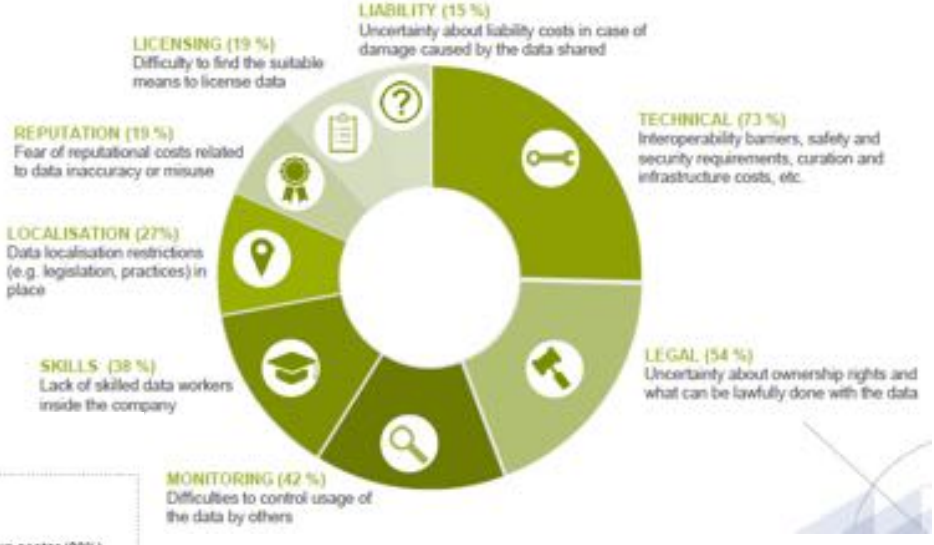
Challenges (technical & non-technical)

- A path from R&I to implementation (+ link AI, 5G, edge)
- Standards-based innovation and (large-scale) procurement across domains (data silos)
- A common technical ground based on minimal interoperability and **city needs**
- Emerging standards (shape and adopt)
- Market validation, including Data monetization, coverage of infrastructure costs
- Privacy, trust, security, GDPR compliance
- Data quality

The Challenge of Data Sharing

Data availability and data sharing for granted?
Source: Everis (Study on B2B data sharing)





Profile of data suppliers

Data suppliers

- Mainly large companies
- 90% share data **within their own business sector**
- A majority only share a **small percentage** of the data they generate
- 1 in 5 consider data sharing as their **main economic activity**
- 1 in 3 have been sharing data for over 8 years
- Very few adopt an Open Data Policy
- **Developing new business models** and/or services and products as main motivation

1 in 2 experience **obstacles** to make their data available

Profile of data users

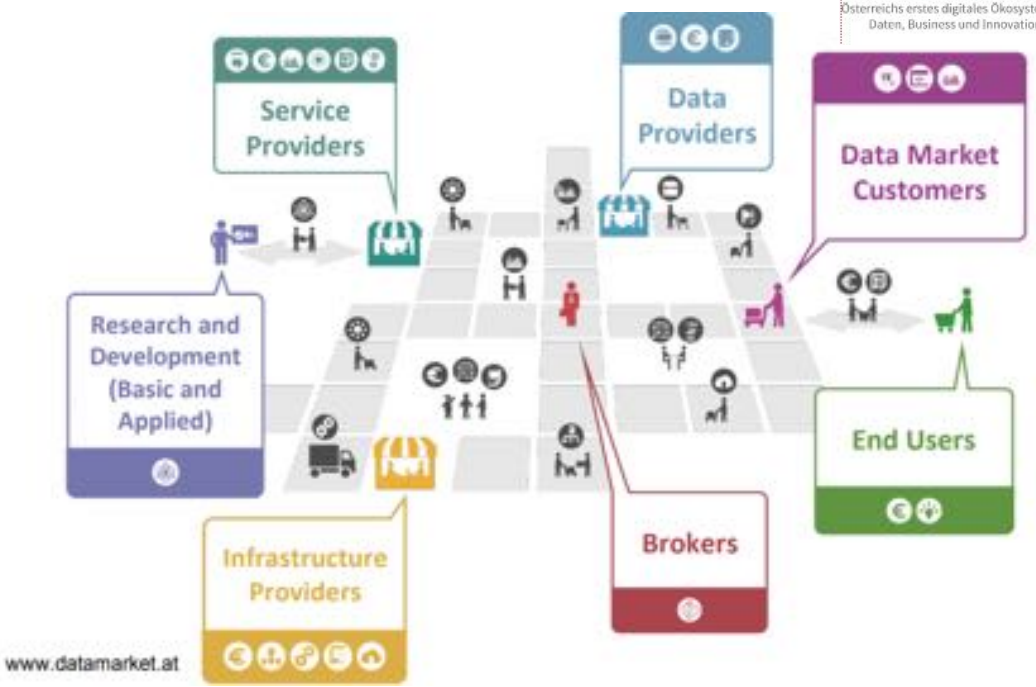
Data users

- Mainly large companies
- Mostly re-using data **from their own sector (83%)**
- **7 in 10 strongly depend on data** for their business
- Half of them have been re-using data for over 6 years
- More than 40 % have spent over €50 000/year to access data in the last years
- **Developing/improving** the catalogue of services and products as main motivation

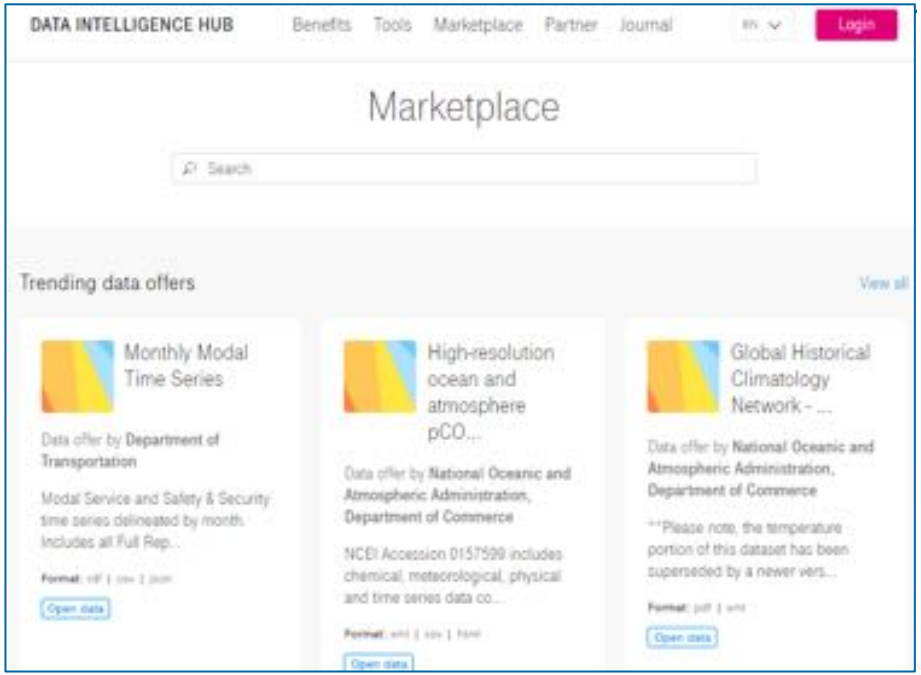
6 in 10 experience **obstacles** to access data from others

Atos

Data sharing spaces, Data platforms



Data Intelligence Lab by



Data Marketplace + Tools for data analysis

“Support Centre for Data Sharing” (SCDS)

Data as key element for AI: European Position and Strategy in AI

OUTLINE

AI strategy for Europe

AI funding in H2020 & beyond:

- AI-on-Demand-Platform
- Digital Innovation Hubs
- Additional calls
- Post-H2020

Ethics Framework

OUTLINE

AI strategy for Europe

AI funding in H2020 & beyond:

- AI-on-Demand-Platform
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- Additional calls
- Post-H2020

Ethics Framework

Maximising benefits from AI

Economic impact

+

Contribution to societal challenges

Healthcare

Energy efficiency

Road safety

Cybersecurity

...

European Commission

EU strengths

Excellent research centres

World-leading position in robotics

Strong business-to-business domain

Strong industrial and services sectors: automotive, healthcare, agrifood

Industrial data

European Commission

EU strategy for AI

A STRATEGY FOR EUROPE TO LEAD THE WAY

- **Boost technological and industrial capacity & AI uptake**
- **Prepare for socio-economic changes**
- **Ensure an appropriate ethical & legal framework**

AI FOR GOOD AND FOR ALL

European Commission

COORDINATED PLAN on AI

Joining forces EC with MS

All Member States
& Norway + Swizerland
signed a Declaration of cooperation on AI

7 December 2018: Coordinated plan on AI published

Member States agreed to work together on:
- **ensuring Europe's competitiveness in the research and deployment of AI**
- **dealing with social, economic, ethical and legal questions**

EU strategy for AI

A STRATEGY FOR EUROPE TO LEAD THE WAY

Boost technological and industrial capacity & AI uptake

Prepare for socio-economic changes

Ensure an appropriate ethical & legal framework

AI FOR GOOD AND FOR ALL

European Commission

BOOSTING THE EU'S TECHNOLOGICAL AND INDUSTRIAL CAPACITY: WP 2018 - 2020

€1.5 billion EC investments into AI in 2018-20

BY 70% INCREASE OF ANNUAL INVESTMENT

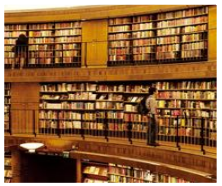
Basic and industrial research

(health, transport, agriculture, manufacturing, etc.)

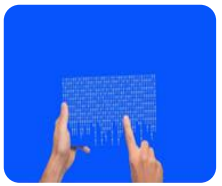
AI-on-demand platform

AI4EU

Network of AI-focused Digital Innovation Hubs (DIHs)



Strengthe-ning AI excellence centres



Setting up an industrial data platform

OUTLINE

AI strategy for Europe

AI funding in H2020 & beyond:

- AI-on-Demand-Platform
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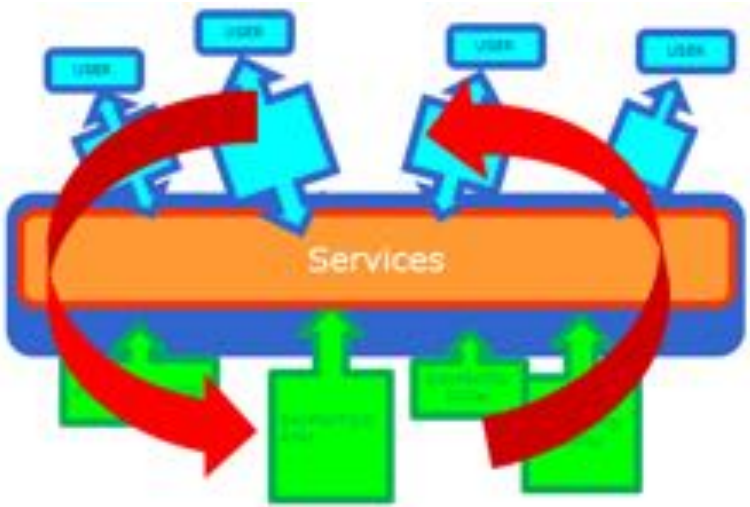
- Post-H2020

Ethics Framework

Work Programme 2018-20
EUROPEAN AI-ON-DEMAND PLATFORM

- Central access point:
  - integrating tools and resources
  - offering solutions and support to all users of AI to integrate such technology into application, products and services
  - **https://www.ai4eu.eu/**



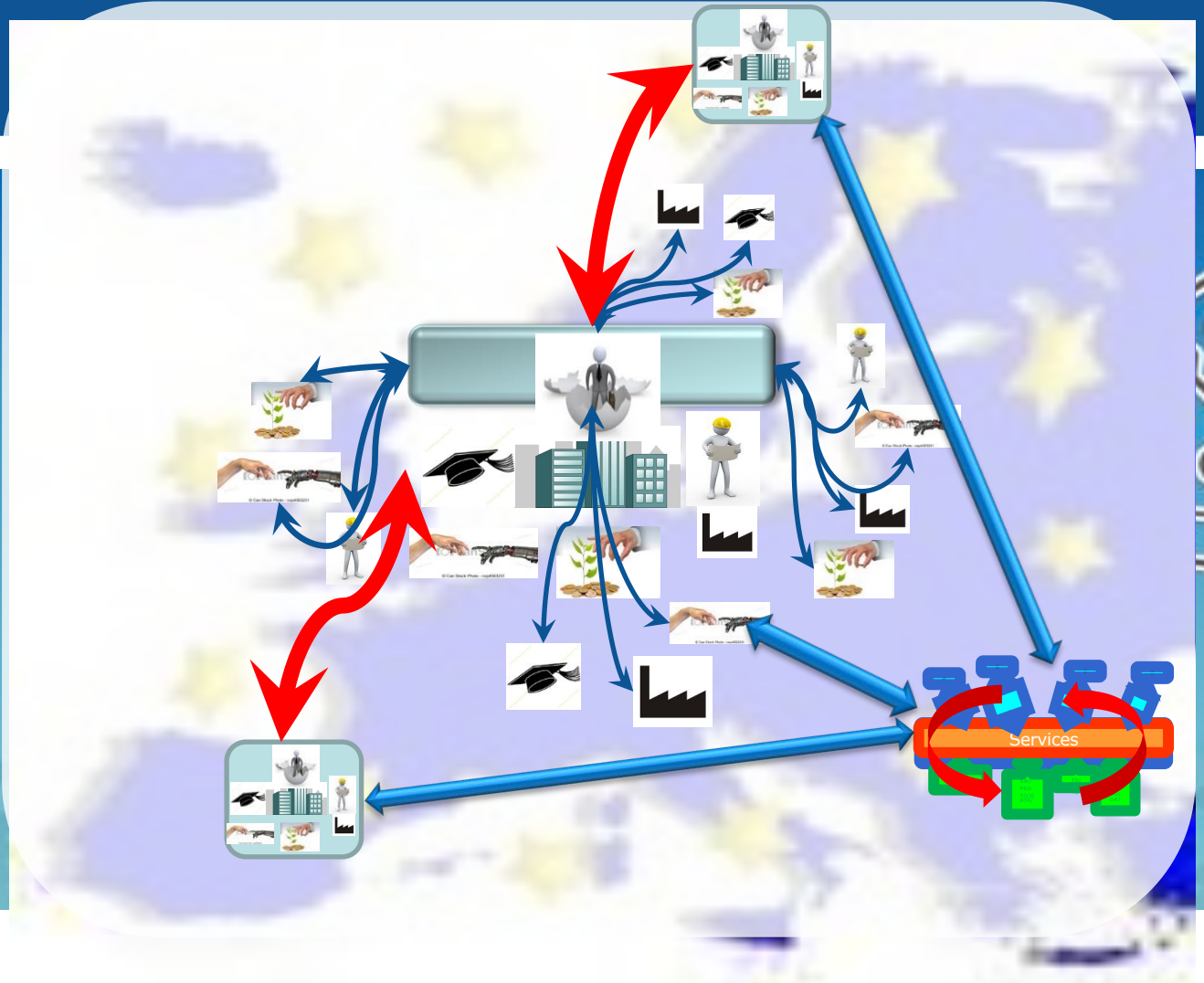
THE PLATFORM = CENTRAL POINT

- Develop a **European AI ecosystem**
  - knowledge, algorithms, tools and resources available and making it a compelling solution for users, especially from non-tech sectors.

- **Build on** and **link to existing** relevant initiatives
  - platforms, data repositories, cloud computing, HPC, etc.

- **Connect** and cooperate with other relevant activities of this **work programme**
  - DIHs, pilots, etc.

➔ OBJECTIVE – CENTRAL ACCESS POINT TO ALL AI RESOURCES in EUROPE, including **RESULTS FROM ALL EU PROJECTS ➔ ALSO YOUR RESULTS**


Services

AI-on-demand Platform:  

Toolbox & Services

+

Network of Digital Innovation Hubs in AI: 

Distribution Channel for AI to empower

ALL local companies/Users

OTHER RELEVANT UPCOMING CALLS

(CHECK PRE-PUBLICATION)

ICT-46-2020: Robotics in Application Areas and Coordination & Support

ICT-47-2020: Research and Innovation boosting promising robotics applications

ICT-48-2020: Towards a vibrant European network of AI excellence centres ➔ infoday [50M€] – bring the best researchers to progress faster / make Europe a powerhouse for AI & attractive for scientists

ICT-49-2020: Artificial Intelligence on demand platform

ICT-38-2020: Artificial intelligence for manufacturing

DT-ICT-05-2020: Big Data Innovation Hubs.

DT-ICT-12-2020: AI for the smart hospital of the future

Goal beyond 2020: Increasing investments from €4-5 billion / year today to €20 billion / year

The next Framework program: post H2020

DIGITAL IN THE NEXT MFF: OVERVIEW

Digital Europe

1. High Performance Computing (HPC)
2. Artificial Intelligence (AI)
3. Cybersecurity
4. Advanced digital skills
5. Digital transformation and interoperability

€9.2 Bn

Digital in Horizon Europe

1. Digital under "global challenges"
   - Digital and industry cluster
   - Digital in other clusters - health, mobility, energy, environment,..
2. FET Open under Open Innovation
3. Research Infra under Open Science

€100 Bn with share to digital of 15Bn

CEF - Digital

Connectivity

- Synergies with Transport /Energy
- WIFI/BB 4EU
- 5G roll out

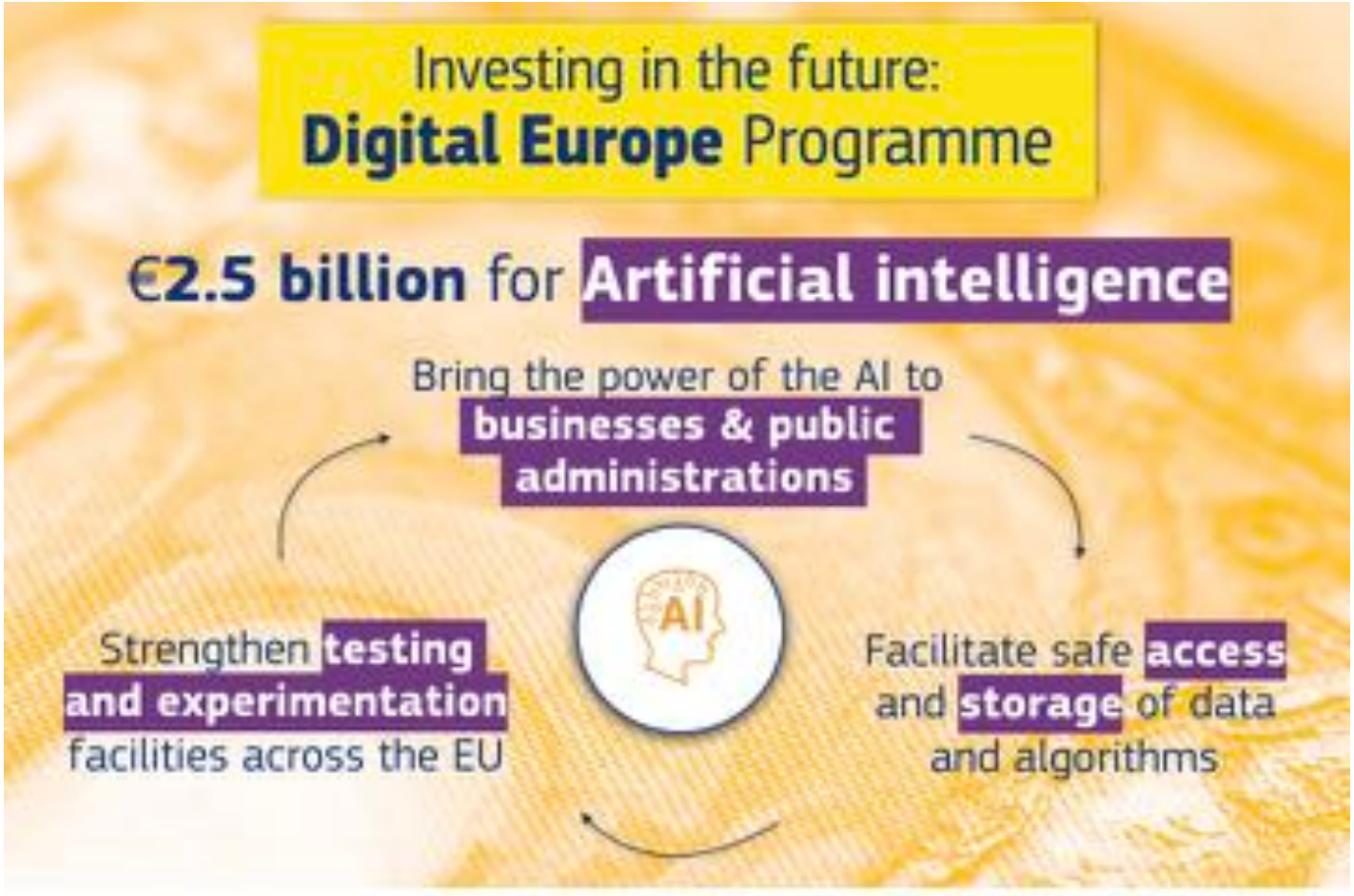
€3 Bn

MEDIA under Creative Europe within Cohesionand Values

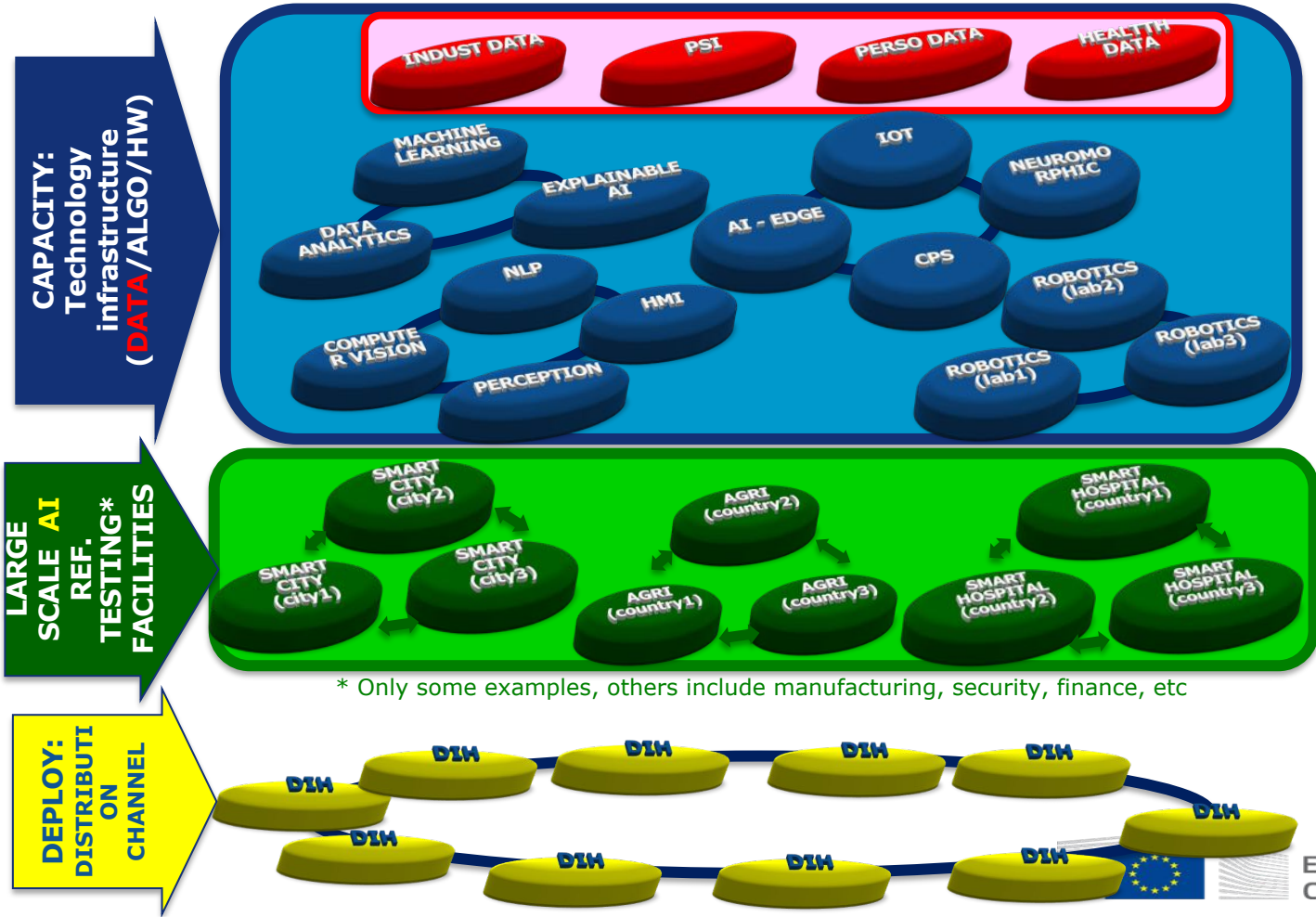
- Distribution of works
- Creation

€1.1 Bn

DIGITAL EUROPE PROGRAMME: CAPACITY BUILDING AND DEPLOYMENT


Investing in the future:
Digital Europe Programme
€2.5 billion for Artificial intelligence
Bring the power of the AI to businesses & public administrations
AI
Facilitate safe access and storage of data and algorithms
Strengthen testing and experimentation facilities across the EU
#EUBudget
#DigitalEurope
European Commission

AI & DIGITAL EUROPE PROGRAMME (DEP): CAPACITY BUILDING & DEPLOYMENT



* Only some examples, others include manufacturing, security, finance, etc

European Commission

Definition (Coordinated Plan)

- *A Reference Testing and Experimentation Facility is a technology infrastructure that has specific expertise and experience of **testing mature technology in a given sector**, under **real or close to real conditions** (e.g. smart hospital, smart city, experimental farm, corridor for connected and automated driving, etc.).*

Concepts

World-class Testing and Experimentation Facilities

- ***Limited number*** *per sector*
- ***Common resource*** *available to all European stakeholders to* ***validate new AI-based solutions*** *in real settings.*
- *Validate all the aspects: technical, socio-economic, legal*
- ***Results*** *available to all* ***throughout Europe*** *(directly, or via the channel of Digital Innovation Hubs).*

Digital Europe Programme
Legal text

- ***Co-investment with Member States in world class reference sites for experimentation and testing in real setting focusing on*** *the applications of AI in essential sectors such as* ***health, mobility, security, manufacturing or finance****. The sites should be open to all actors across Europe and connected to the Network of Digital Innovation Hubs. They should be equipped with large computing and data handling facilities as well* ***as latest AI technologies*** *including* ***emerging*** *areas such as neuromorphic computing, deep learning and robotics.*

OUTLINE

AI strategy for Europe

AI funding in H2020 & beyond:

- AI-on-Demand-Platform
- Digital Innovation Hubs
- Additional calls
- Post-H2020

Ethics Framework

Ethical and legal framework

High level group of experts

Ethics guidelines
&
Policy & Investment recommendations

European Commission

The European AI Alliance

JOIN @
https://ec.europa.eu/digital-single-market/en/european-ai-alliance
And contribute to the debate

The European AI Alliance

Joint reflection on the future of AI in Europe

Full mobilisation of all stakeholders needed: industry, academia, civil society

Supported by high-level expert group on AI and an online platform

Goal: Making it the world-wide reference platform for thinking and reflecting on AI

Building Trust in Human-Centric AI
(COM(2019)168)

4 ETHICAL PRINCIPLES

- Respect for human autonomy
- Prevention of harm
- Fairness
- Explicability

7 REQUIRE

- Human agency and oversight
- Technical robustness and safety
- Privacy and data governance
- Transparency
- Diversity, non-discrimination and fairness
- Societal and environmental wellbeing
- Accountability

ASSESSMENT LIST

- **Operationalise the requirements**

BE PART OF IT!
➔ REGISTER TO THE PILOTING PROCESS

via the European AI Alliance

Ethics Guidelines for AI – Piloting Process

- How to participate? Register today*
  - Test out the assessment list
  - Provide us with feedback through an online survey
- In parallel: in-depth feedback process with selected stakeholders

* https://ec.europa.eu/futurium/en/register-piloting-process

European Commission

Next steps

- ✓ 26 June: Presentation Recommendations & Kick-off Piloting
- ❑ Feedback gathering on assessment list from July till December 2019
- ❑ Revised version assessment list & sectorial recommendations in 2020
- ❑ Commission will then decide on Next Steps

Policy and Investment recommendations

High level group of experts → Policy & Investment recommendations

European Commission

Policy and Investment recommendations

CHAPTER I: **USING** TRUSTWORTHY AI TO BUILD A POSITIVE IMPACT IN EUROPE

- **Empowering and Protecting Humans and Society**
- **Transforming Europe's Private Sector**
- **Europe's Public Sector as a Catalyst of Sustainable Growth and Innovation**
- **Ensuring World-Class Research Capabilities**

CHAPTER II. LEVERAGING EUROPE'S **ENABLERS** FOR TRUSTWORTHY AI

- **Building Data and Infrastructure for AI**
- **Generating appropriate Skills and Education for AI**
- **Establishing an appropriate governance and regulatory framework**
- **Raising Funding and Investment**

Data as key element for AI: Towards an AI Public-Private-Partnership

"**Artificial intelligence will transform** many if not all branches of economic activity, …. The application of **AI will be key** to be able to turn personal health… "
Henk van Houten,
Chief Operating Officer, Chief Technology Officer, Philips

"**Robotics and Artificial Intelligence are key** enablers for offering solutions to many of our societal challenges, from demographic changes to sustainable production and healthy living…."
Peter Mohnen, CEO KUKA AG

Europe cannot miss the possibility to be disruptive in the development and adoption of leading Artificial Intelligence solutions ... to be adopted inside and outside Europe."
Orazio Viele, CTO Engineering Ingegneria Informatica S.p.A.

""Artificial intelligence will shift the balance of power in the shortest possible time. … **Europe can and must be the pacemaker(s) for Industrial AI** …. in Europe the domain knowledge is available and **we have a powerful network** between SMEs, big companies, research institutes and government. …."
Dr. Roland Busch
Chief Operating Officer, Chief Technology Officer and member of the Managing Board of Siemens AG

""**Artificial intelligence will be an enabler for innovation and a core driver of productivity** and economic growth, enabling the "intelligent enterprise" through human-machine collaboration, and enabling humans to focus on higher-quality work. …**AI developments must respect European values** and legal standards in order to gain broad social acceptance on which the success of AI in Europe depends. ."
Dr. Juergen Mueller
Chief Technical Officer, Lead of the Technology and Innovation division and member of the Executive Board of SAP SE

"…. AI PPP that seeks to increase **value-creating collaboration between advanced research, universities and industry** *is of great importance for the development of the AI- and AI-based industry in Europe.."*

Professor Morton Irgens
CLAIRE , Vice Rector, Oslo Metropolitan University

"…. The challenge is for industry to harness that power. The **AI PPP will help achieve that by bringing together expertise in algorithms, sensors and robotics, and addressing the realities of regulation and the need to build partnerships.** *…."*

Professor Andrew Blake
Former Laboratory Director of Microsoft Research Cambridge and former Director of Alan Turing Institute and member of ELLIS

"…. An AI Public-Private Partnership would provide an important mechanism for **bringing key stakeholders from the research and industry communities together.** *…. We very much welcome an opportunity to collaborate with euRobotics and the BDVA in bringing many key capabilities within the European eco-system together to address the opportunities and challenges presented by AI."*

Professor Barry O`Sullivan
President of the European AI Association

Levers for achievement

- Collaboration with different stakeholders across Europe
- Openness and inclusiveness to bring European knowledge together
- Joint strategy leveraging European strengths and unique selling points to be developed
- Focused approach to be fast with high impact
- Facing and solving the AI challenges together!

*The Vision is to **boost** European industrial competitiveness and lead the world in developing and deploying value-driven trustworthy AI based on European fundamental rights, principles and values.*

The last six months…

eu ROBOTICS

BDV BIG DATA VALUE ASSOCIATION

MoU Signed December 2018

Joint AI Vision Paper March 2019

European Commission Communication on AI December 2018 & April 2019

European Commission

eu ROBOTICS

BDV

Joint AI SRIA May 2019

Topic Groups

eu ROBOTICS

6th June

Public Event Brussels

Acknowledgements

Partnership Coordination Group

Chairs: Thomas Hahn (BDVA President) and Bernd Liepert (euRobotics President)

From euRobotics: David Bisset (Executive Director euRobotics), Renaud Champion (Primnext), Reinhard Lafrenz (Secretary General euRobotics), and Alessandro Saffiotti (Örebro University, Sweden)

From BDVA: Edward Curry (Insight), Laure Le Bars (SAP), Milan Petkovic (Philips), and Ana García Robles (Secretary General BDVA)

Contributors

Jon Agirre Ibarbia (Tecnalia), Daniel Alonso (ITI), Abdellatif Benjelloun (Huawei), Arne Berre (SINTEF), David Bernstein (IBM), Natalie Bertels (imec-CiTiP-KU Leuven), Rainer Bischoff (KUKA), David Bisset (iTechnic), Freek Bomhof (TNO), Rodrigo Castiñeira (Indra), Renaud Champion (Primnext), Anca Costea (Terrasigna), Edward Curry (Insight), Davide Dalle Carbonare (Engineering), Nuria de Lama (ATOS), Marija Despenic (Philips), Roberto di Bernardo (Engineering), Gerald Feichtinger (Know-Center), Maria Eugenia FuenMayor (Eurecat), Ana García Robles (BDVA), Stefan Gessler (NEC), Jon Ander Gómez (UPV and SolverML), Sergio Gusmeroli (Polimi), Martin Hägele (Fraunhofer-IPA), Thomas Hahn (Siemens AG), Rob Heyman (imec-SMIT-VUB), Björn Hovstadius (RISE), Bart Janssens (VRT), Jim Kenneally (Intel), Vivian Kiousi (INTRASOFT Intl), Reinhard Lafrenz (euRobotics), Laure Le Bars (SAP), Till Lech (SINTEF), Yannick Legré (EGI), Bernd Liepert (euRobotics), Stefanie Lindstaedt (Know-Center), Ulrich Löwen (Siemens AG), Ernestina Menasalva (UPM), Andreas Metzger (Paluno/UDE), Philippe Mouttou (Thales), Adegboyega Ojo (Insight), Michele Osella (Links Foundation), Geoff Pegman (RURobots), María Pérez (UPM), Milan Petkovic (Philips), Thanasis Poulakidas (INTRASOFT Intl), Antonis Ramfos (ATC), Andrea Reale (IBM), Valère Robin (Orange), Vega Rodrigálvarez (ITA), Juha Röning (Univ. Oulu), Thomas Runkler (Siemens AG), José Saenz (Fraunhofer-IFF), Daniel Sáez (ITI), Alessandro Saffiotti (Örebro University), Sherif Sakr (Uneversity of Tartu), Almudena Sánchez (GMV), Simon Scerri (Fraunhofer-IAIS), Marc Schonauer (Inria), Harald Schöning (Software AG), Robert Seidl (Nokia), Florin Serban (Terrasigna), Caj Södergård (VTT), Stefano Stramigioli (UTwente), Michael Suppa (Roboception), Stefan Van Baelen (imec), Andrejs Vasiljevs (Tilde) , Markus Vincze (TU Wien), Henk Jan Vink (TNO), Rich Walker (Shadow), Walter Weigel (Huawei), Dimitris Zissis (MarineTraffic).

Members of the Board of Directors of BDVA (http://bdva.eu/board-members) and euRobotics (https://www.eu-robotics.net/eurobotics/about/board-of-directors)

Workshops

We are very grateful to the 200+ participants at the 6 workshops by BDVA and euRobotics held in Feb-May 2019:

- BDVA workshop on February 27th (BDVA members and BDV PPP projects)
- Joint workshop on March 20th in Bucharest (public at ERF2019)
- euRobotics workshop on April 11th in Brussels (with BDVA participation)
- BDVA workshop on April 30th in Brussels (with euRobotics participation)
- euRobotics workshop on May 8th in Brussels (with BDVA participation)
- BDVA workshop on May 16th in Brussels (with euRobotics participation)

We are also very grateful with all additional contributions from members of the BDVA Task Forces and euRobotics Topic Groups.


IMAGINE 18
04-06 Dec 2018 Vienna
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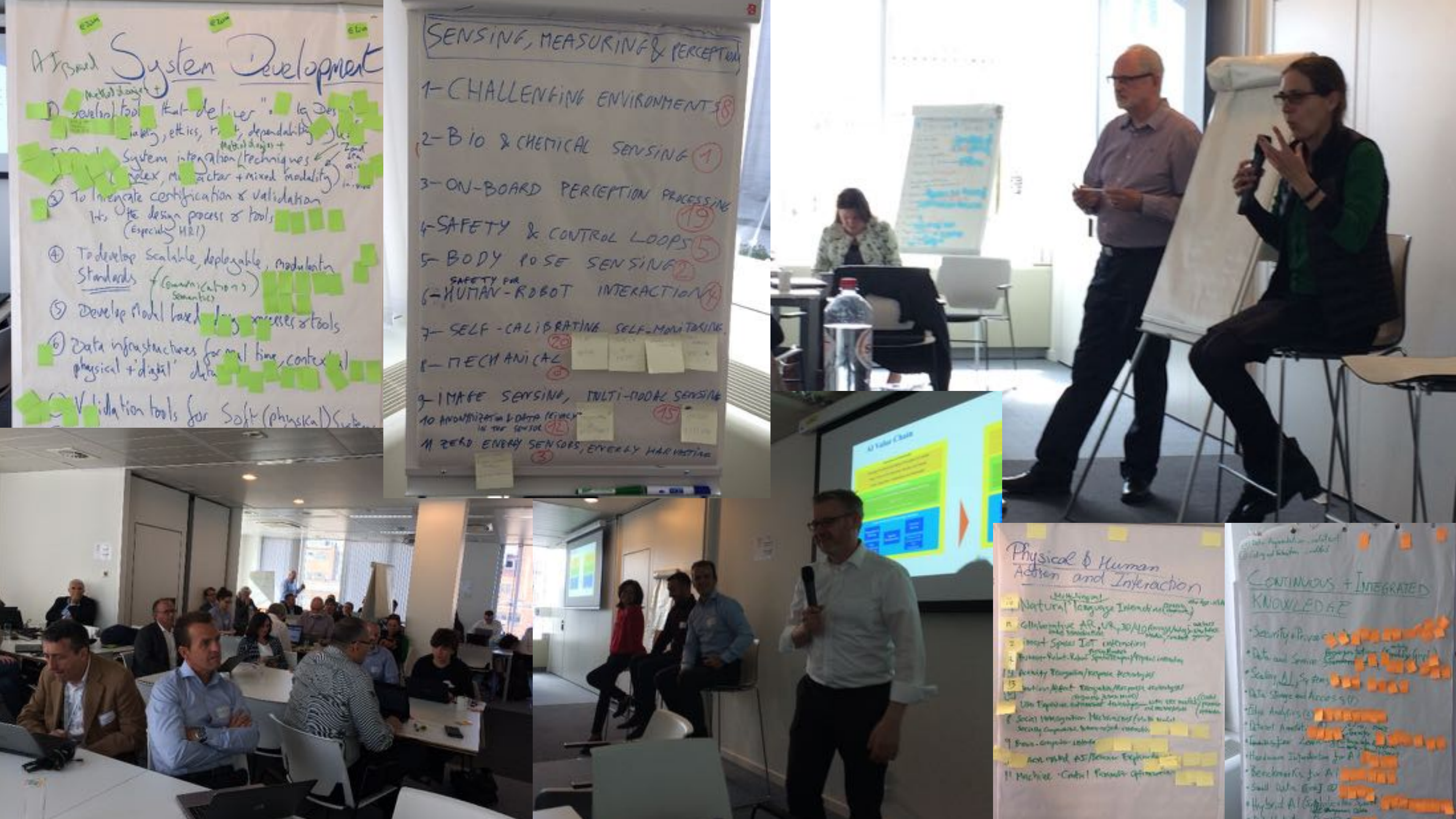
Federal Ministry
Republic of Austria
Transport, Innovation
and Technology
FFG


JW MARRIOTT


System Development
SENSING, MEASURING & PERCEPTION
1- CHALLENGING ENVIRONMENTS
2- BIO & CHEMICAL SENSING
3- ON-BOARD PERCEPTION PROCESSING
4- SAFETY & CONTROL LOOPS
5- BODY POSE SENSING
6- HUMAN-ROBOT INTERACTION
7- SELF-CALIBRATING SELF-MONITORING
8- MECHANICAL
9- IMAGE SENSING, MULTI-MODAL SENSING
11 ZERO ENERGY SENSORS, ENERGY HARVESTING
AI Value Chain
Physical & Human Action and Interaction
CONTINUOUS + INTEGRATED KNOWLEDGE

AI Market Opportunities

Improved Healthcare Services

Solution
Transition to new care models, e.g. value-based healthcare

Value
- **Personalised diagnosis**
- **New opportunities for intervention**
- **Improved surgery**
- **Better clinical decision making**

Improved Energy Efficiency

More than 200 GB of sensor data from ≈ 7.800 wind parks

Use of Reinforcement Learning

Early detection of divergent behavior

Value

Approx. **1-3% increase of annual energy harvest**

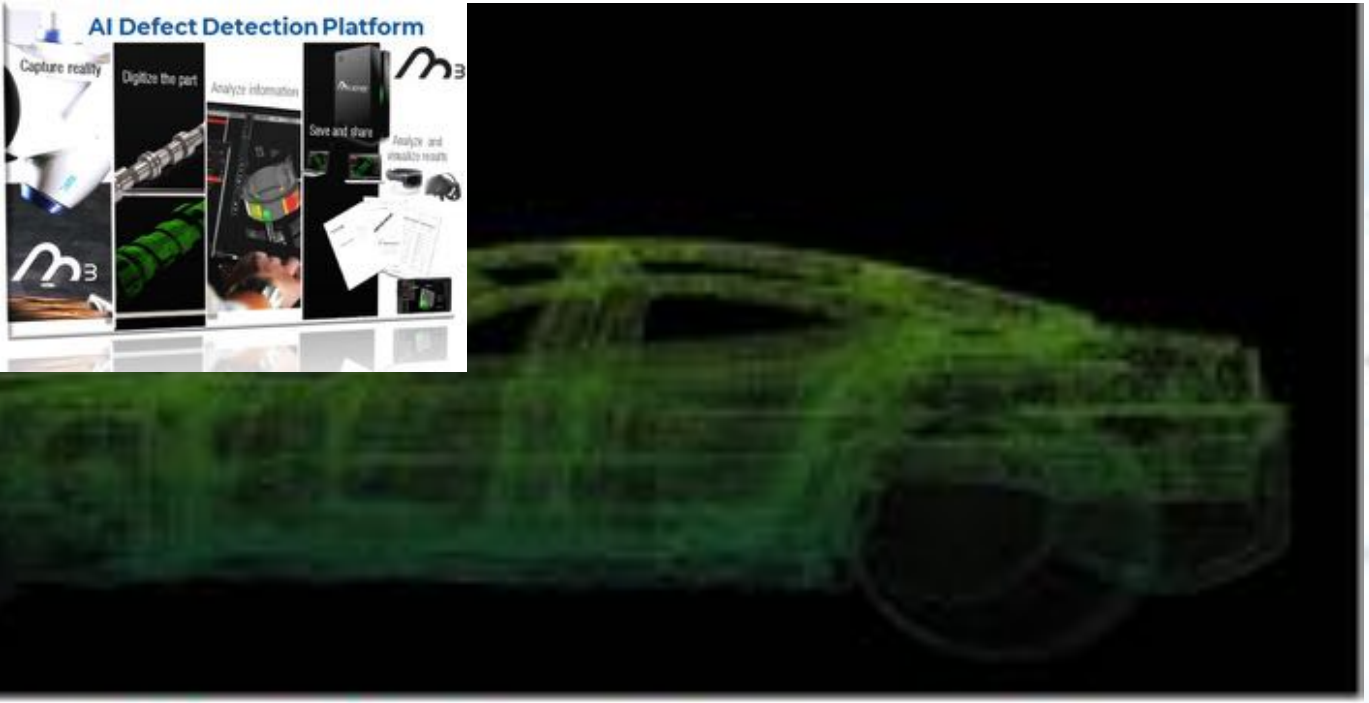
Source: Common research project ALICE with Siemens, IdaLab GmbH, TU Berlin

Improved Availability of Trains

Solution
Analytics on sensor data of critical components
for predictive maintenance

Value
- **On-time rate of 99.9%**
- Due to high reliability
  60% passengers switched from aircraft to train

Increase Productivity in the Digital Factory



Solution

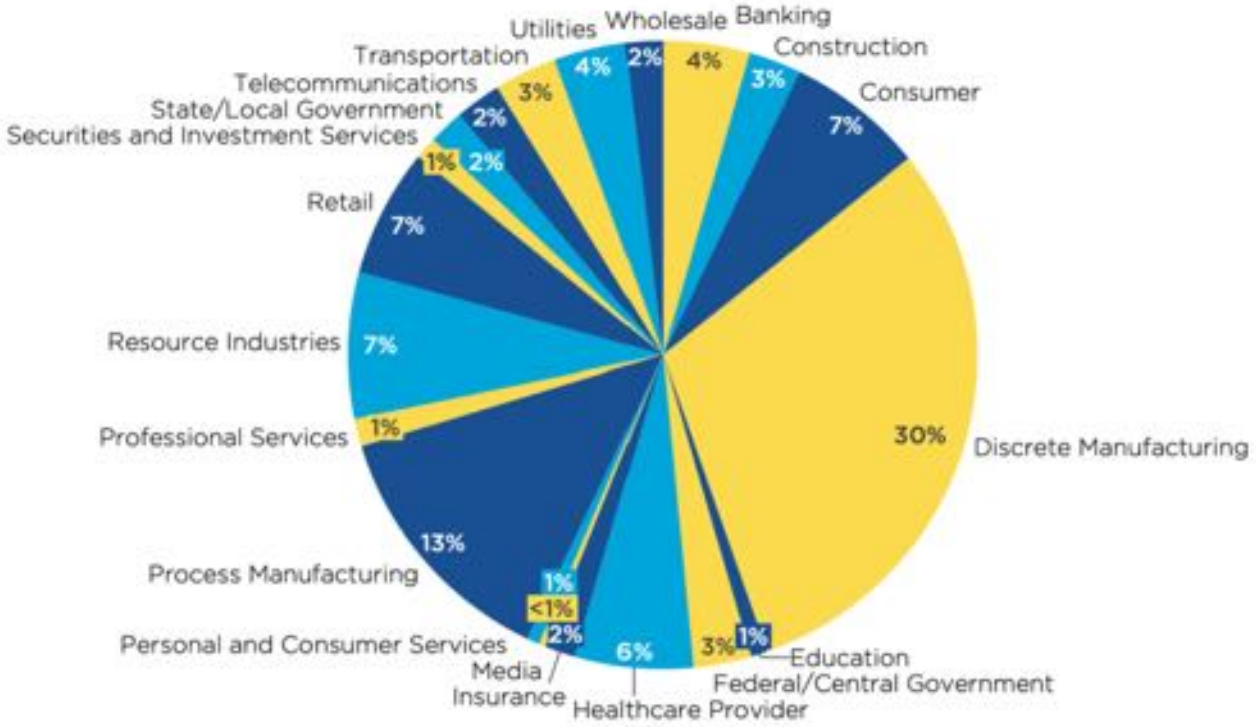
Reduced Failure Rate in Digital Factory by predictive defect detection in the stamping process (End of Line); based on 3D high density data set from simulation

Value

- **50% less quality control time**
- **Less product rejection**
- **Faster defect detection**

Boost 4.0
BIG DATA FOR FACTORIES

AI Opportunities exist across sectors



S R A D

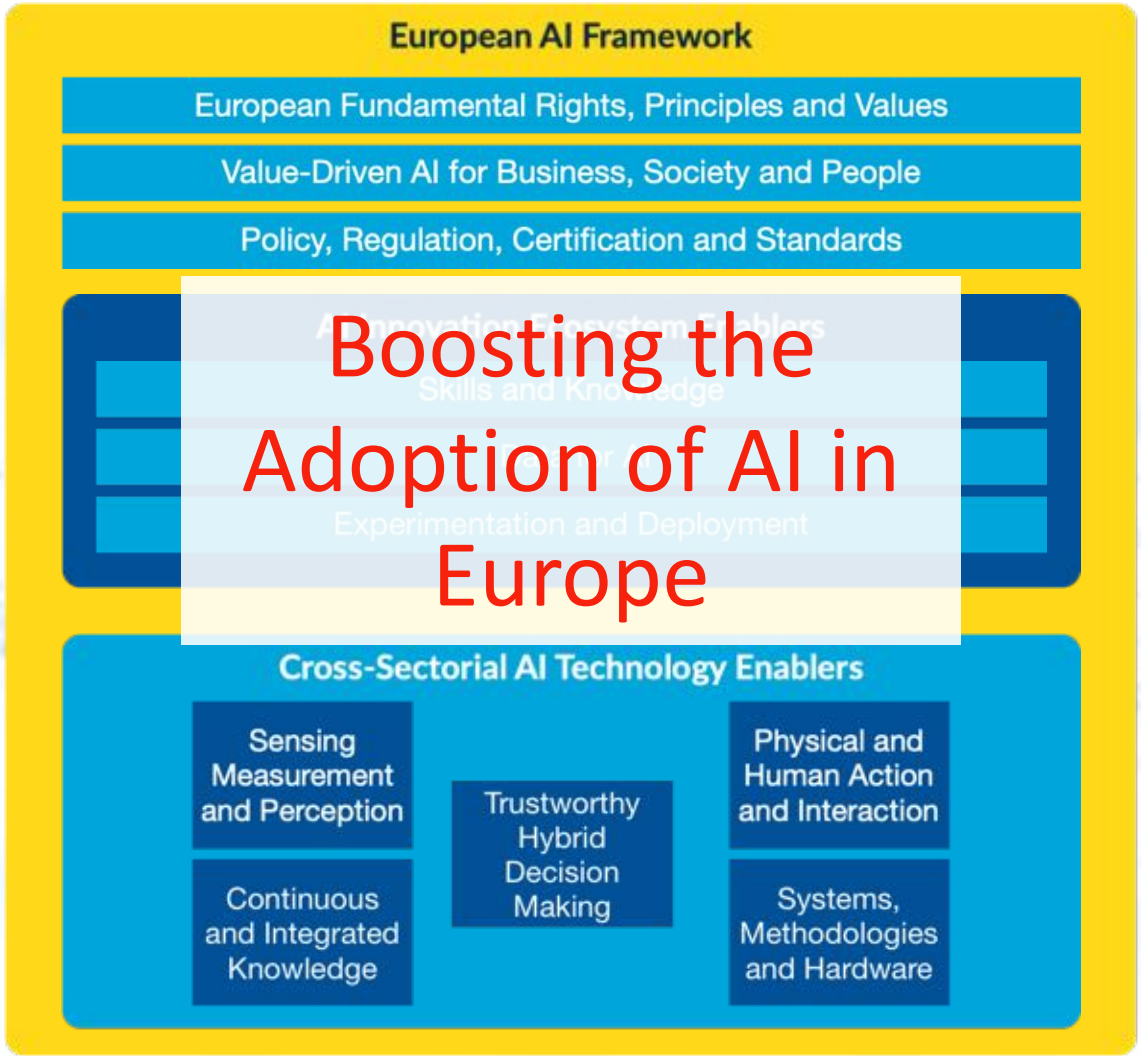
Strategic

Research

Agenda

Innovation

Deployment



Boosting the Adoption of AI in Europe

Adoption Challenges

EU private investment environment

Skills and Know-How

Societal Trust in AI:

Research Landscape

Digital Single Market

Complex Technological Barriers

AI Policy and Regulation

Access to AI Infrastructure

Complexity of AI in Industry and Public domain:

Adoption Challenges

EU private investment environment

Skills and Know-How

Societal Trust in AI:

Research Landscape

Digital Single Market

Complex Technological Barriers

AI Policy and Regulation

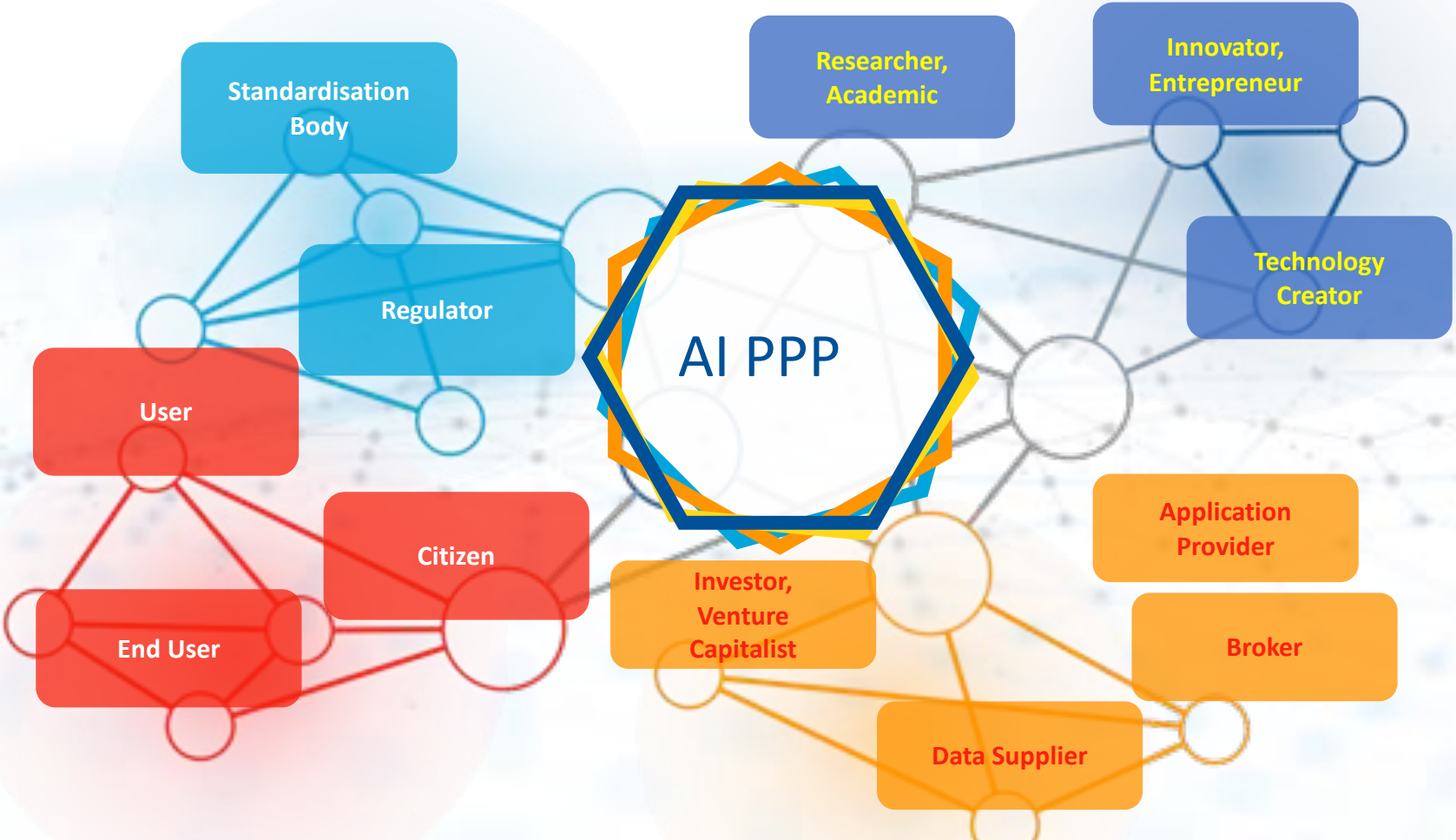
Access to AI Infrastructure

Complexity of AI in Industry and Public domain:

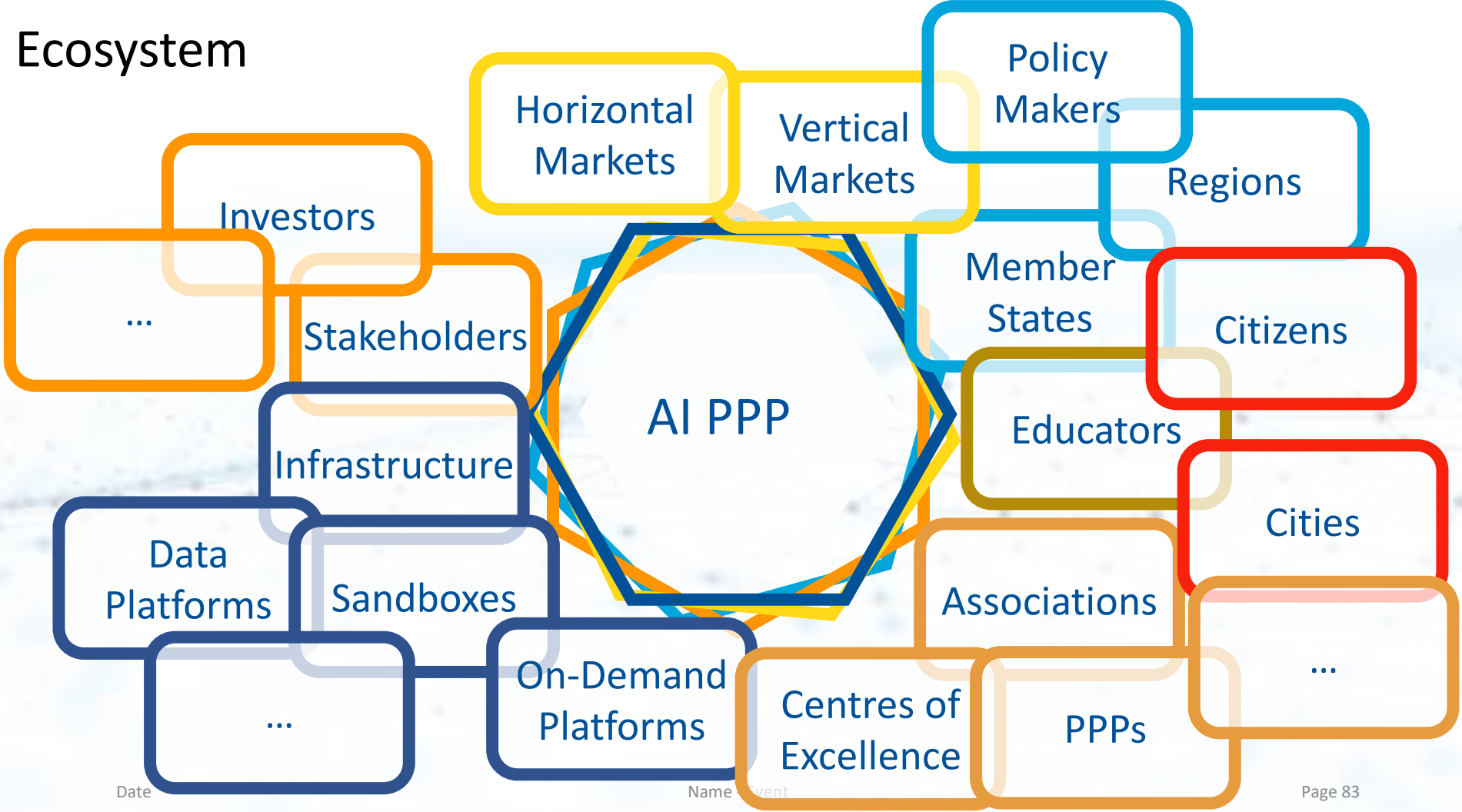
Overcoming these challenges requires collective action from all stakeholders working together in an effective AI Innovation Ecosystem

Stimulated by the AI PPP

Stakeholders



Ecosystem


Horizontal Markets
Vertical Markets
Policy Makers
Regions
Investors
...
Stakeholders
Member States
Citizens
AI PPP
Infrastructure
Educators
Cities
Data Platforms
Sandboxes
Associations
...
On-Demand Platforms
Centres of Excellence
PPPs


Join Forces
WA1: Mobilising the European AI Ecosystem
Research Communities
Horizontal Partnerships
Vertical Partnerships
Regional, National & European Initiatives
Boost Academia-Industry collaborations
WA5: Promoting Research Excellence
Jointly Implement the SRIDA
Promote Collaboration
Promote Excellence
Align Industry & Research
AI PPP
Open and Inclusive
WA2: Skills & Acceptance
Build a strong AI Skill Pipeline
Understand requirement
Promote career path
Engage with Citizens
Promote Diversity
Build trust in AI and create a level market
WA4: Guiding Standards & Regulation
Promote standards
Engage with regulators
Promote sandboxes
Promote guidelines
Communicate with policymakers
WA3: Innovation & Market Enablers
Stimulate industrial investments
Aligning with end users Monitor Innovation
Promote experimentation
Connect to infrastructure
Connect to finance

Implementing the AI PPP

- Get Involved in the Open Consultation
- Objective: bring together stakeholders from the European AI Innovation Ecosystem to achieve consensus on the way forward

- Get in contact with us by
    - Join in our events
    - Engage the Associations
    - Send us an email

      joining-forces@ai-ppp.eu

Stay tuned and have your say

Download the SRIDA:

http://www.bdva.eu/downloads

https://www.eu-robotics.net/eurobotics/about/downloads

Contact:

joining-forces@ai-ppp.eu

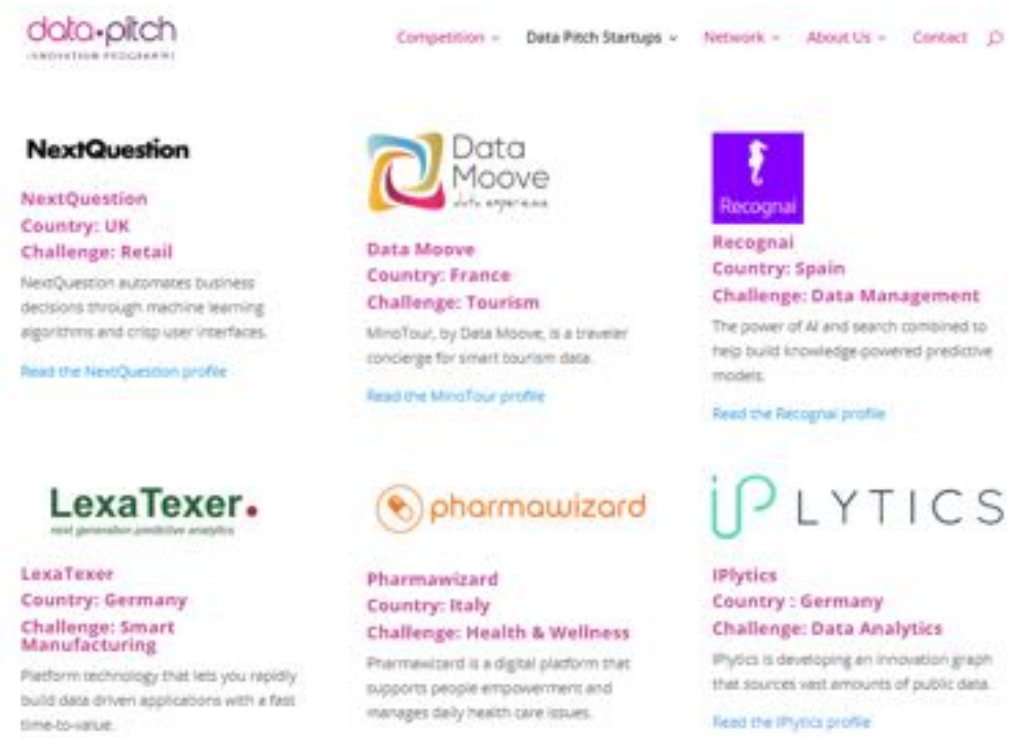
www.eu-robotics.net www.bdva.eu

BDV BIG DATA VALUE ASSOCIATION eu ROBOTICS

Opportunities…for YOU!

Are you an entrepreneur?

EUROPEAN DATA INCUBATOR



Now it is your turn: Q&A

Thank you

For more information please contact:
Nuria de Lama
European Programs Manager, Atos
Board of Directors, Big Data Value Association
nuria.delama@atos.net

Atos