PPP Europea de Big Data: actividades, agenda estratégica y portfolio

F. Javier Herrera – 17/01/18 – Madrid
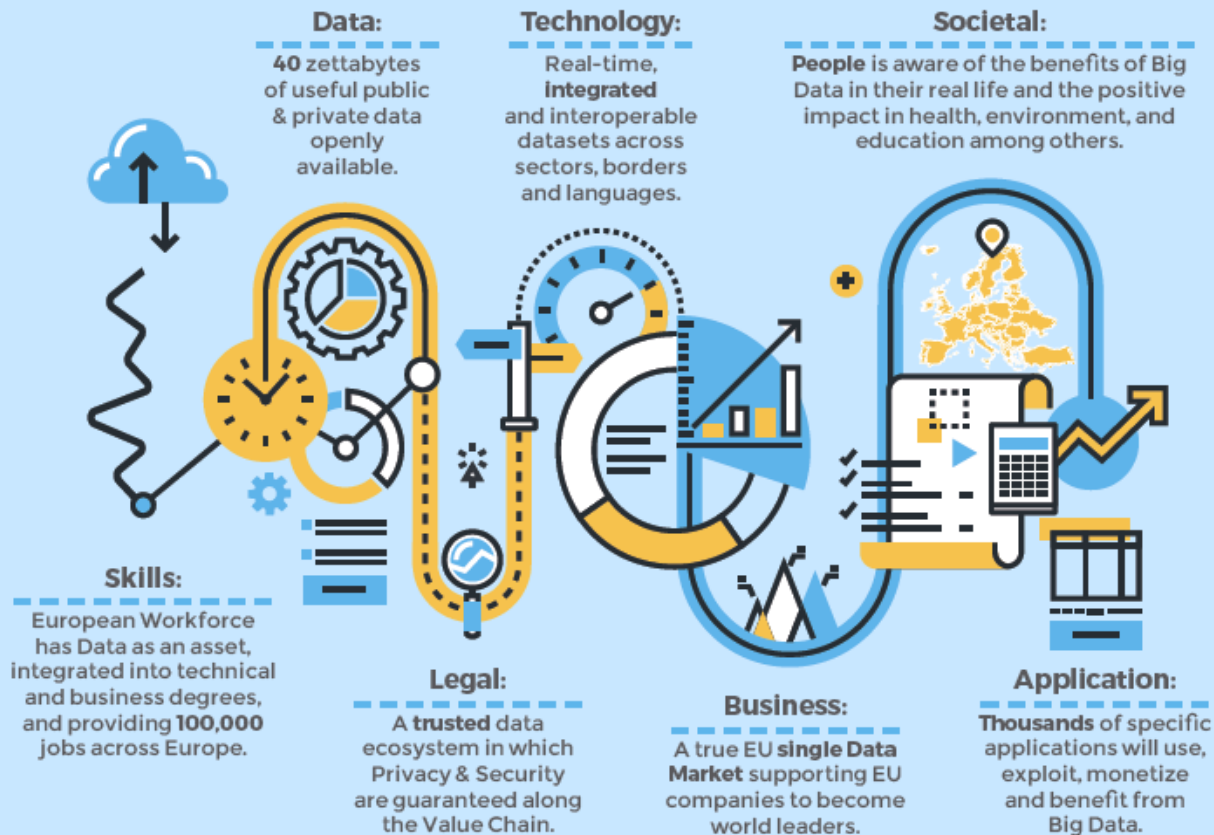
INDEX

BDV BIG DATA VALUE

The EU and Industry launched the Contractural Public Private Partnership (cPPP) on Big Data Value in 2014-10
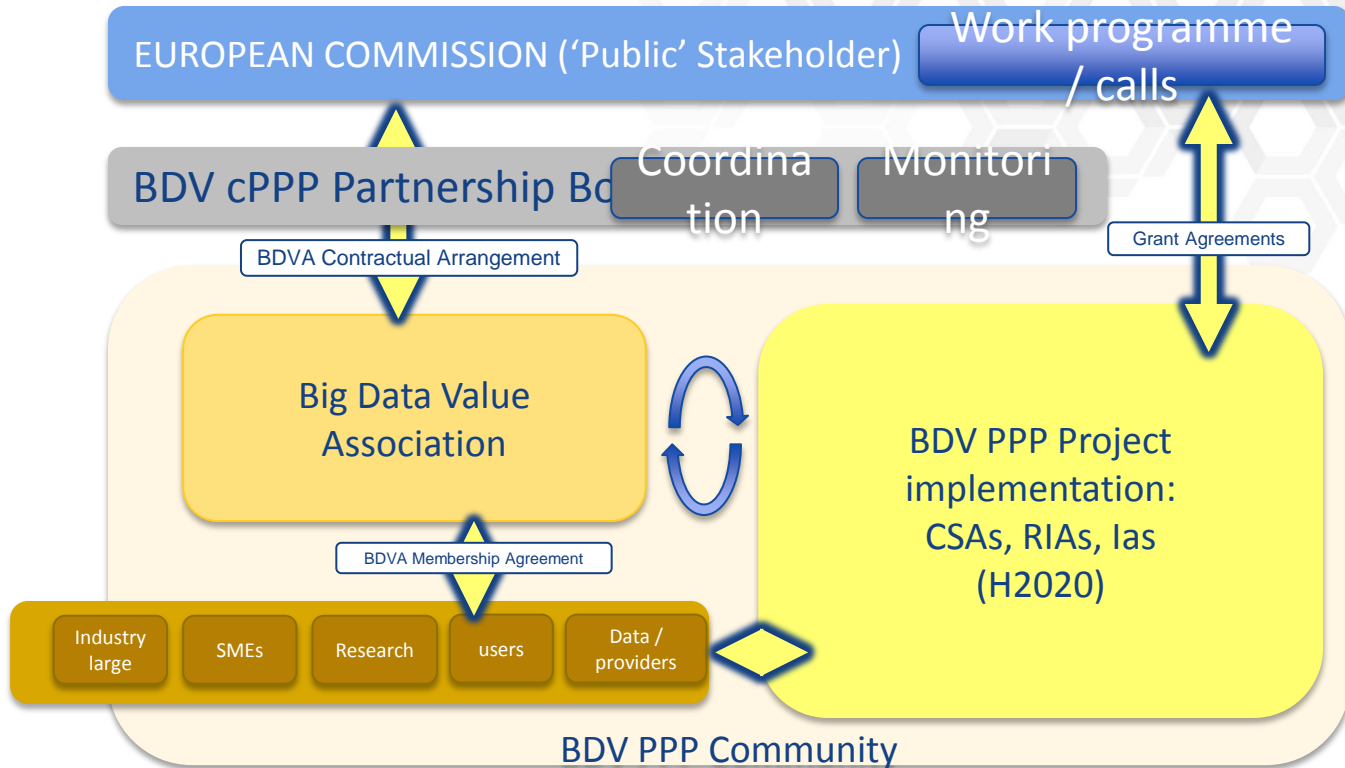
Big Data Value PPP: Investment

- "The European Commission and Europe's data industry have committed to invest €2.5 billion in a public-private partnership (PPP) that aims to strengthen the data sector and put Europe at the forefront of the global data race."
- "The EU has earmarked over €500 million of investment over 5 years (2016-2020) from Horizon 2020"
- Private partners are expected to leverage this through sector investments of four times the cPPP budget (ie €2 billion)
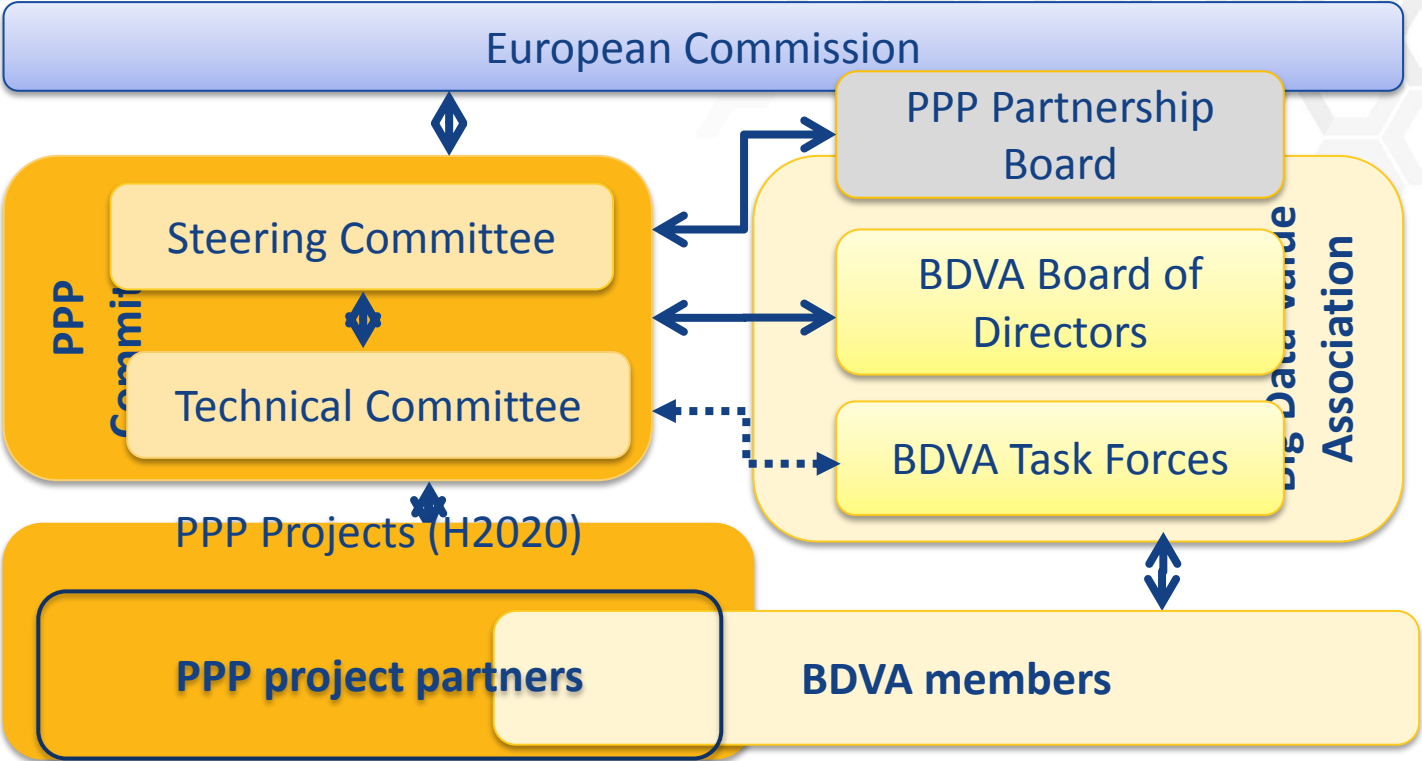
Big Data Value Vision for 2020

BDV BIG DATA VALUE

Data:
40 zettabytes of useful public & private data openly available.

Technology:
Real-time, **integrated** and interoperable datasets across sectors, borders and languages.

Societal:
People is aware of the benefits of Big Data in their real life and the positive impact in health, environment, and education among others.

Skills:
European Workforce has Data as an asset, integrated into technical and business degrees, and providing **100,000** jobs across Europe.

Legal:
A **trusted** data ecosystem in which Privacy & Security are guaranteed along the Value Chain.

Business:
A true EU **single Data Market** supporting EU companies to become world leaders.

Application:
Thousands of specific applications will use, exploit, monetize and benefit from Big Data.

BDV PPP Structure

BDV PPP Governance and Members

BDV PPP Membership

Industry-driven and fully self-financed international non–for-profit organisation under Belgian law

194 Members
- 35 Large companies
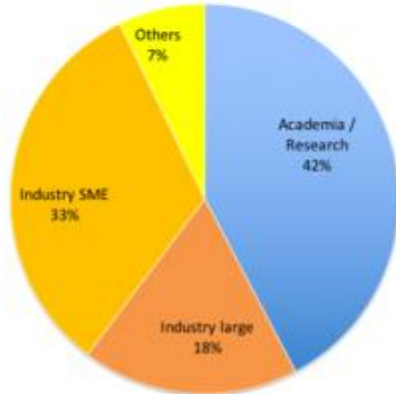- 63 SMEs
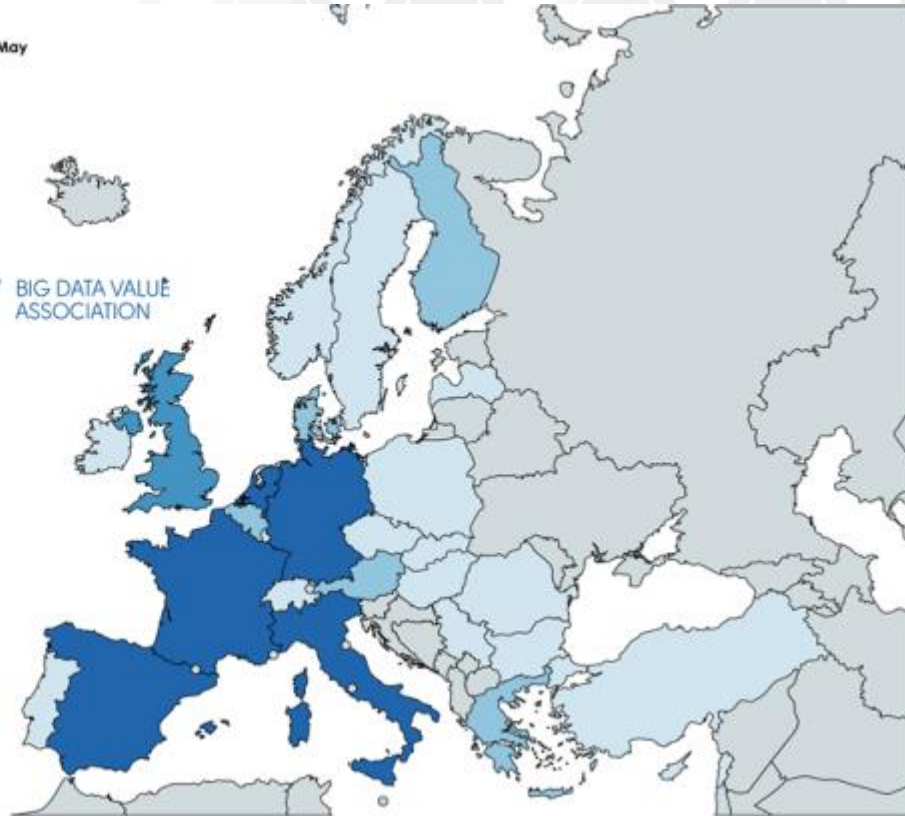- 82 Research institutions
- 14 Others

88 Full members
106 Associate members

Present in 28 countries

BDV BIG DATA VALUE ASSOCIATION

BDVA members per country (May 2017)
- 15 o more members
- 10 - 14 members
- 5 - 9 members
- 1 - 4 members

Others 7%
Academia / Research 42%
Industry large 18%
Industry SME 33%

Created with mapchart.net ©

CURRENT HOT TOPICS

Last meeting: AG23 (Dec 13-14/17)

Main topics for this Activity Group meeting:

- ICT12 (pitches from members)
- Privacy preserving (ICT13b RIA IDP/PDP) (pitches from members)
- Artificial Intelligence (ICT26, and general strategy)
- ICT11a / ICT14 (HPC-BD session)
- ICT11b (pitches from members)
- GDPR
- Transport and mobility workshop
- TF5 new topic
- Post H2020

BDVA Plenary topics:

- BDVA position to post H2020
- Monitoring report 2017
- TF9 Skills
- Year 2018 planning of activities
- Other topics from TF/SGs
- Big Data Prize (to be launched in December 2017)
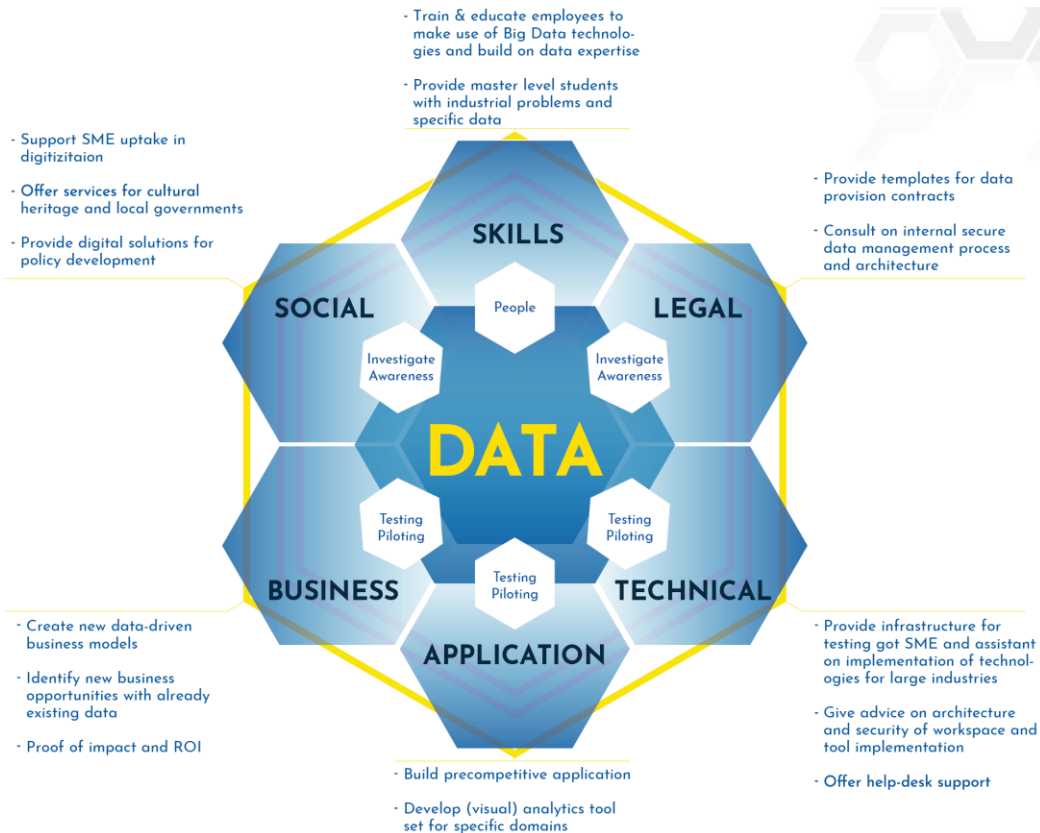
Previous meeting: AG22 (Oct 18/17)

Focus and objectives:

- Preparation for H2020 LEIT WP2018+ calls
- SRIAv4
- Public papers to be released in 2017 (Strategic priority "Data Innovation guidelines")
- Digital skills (Strategic priority "Knowhow and Skills")
- Networking and brokering
- Final preparations for EBDVF2017 (when needed)

Main topics for this Activity Group meeting:

- Data platforms / IDP / PDP
- Technology integration BD, HPC, Cloud
- Digital Skills
- SMI position paper
- Consolidation BDVA Big Data Reference model – TF6
- SRIA v4
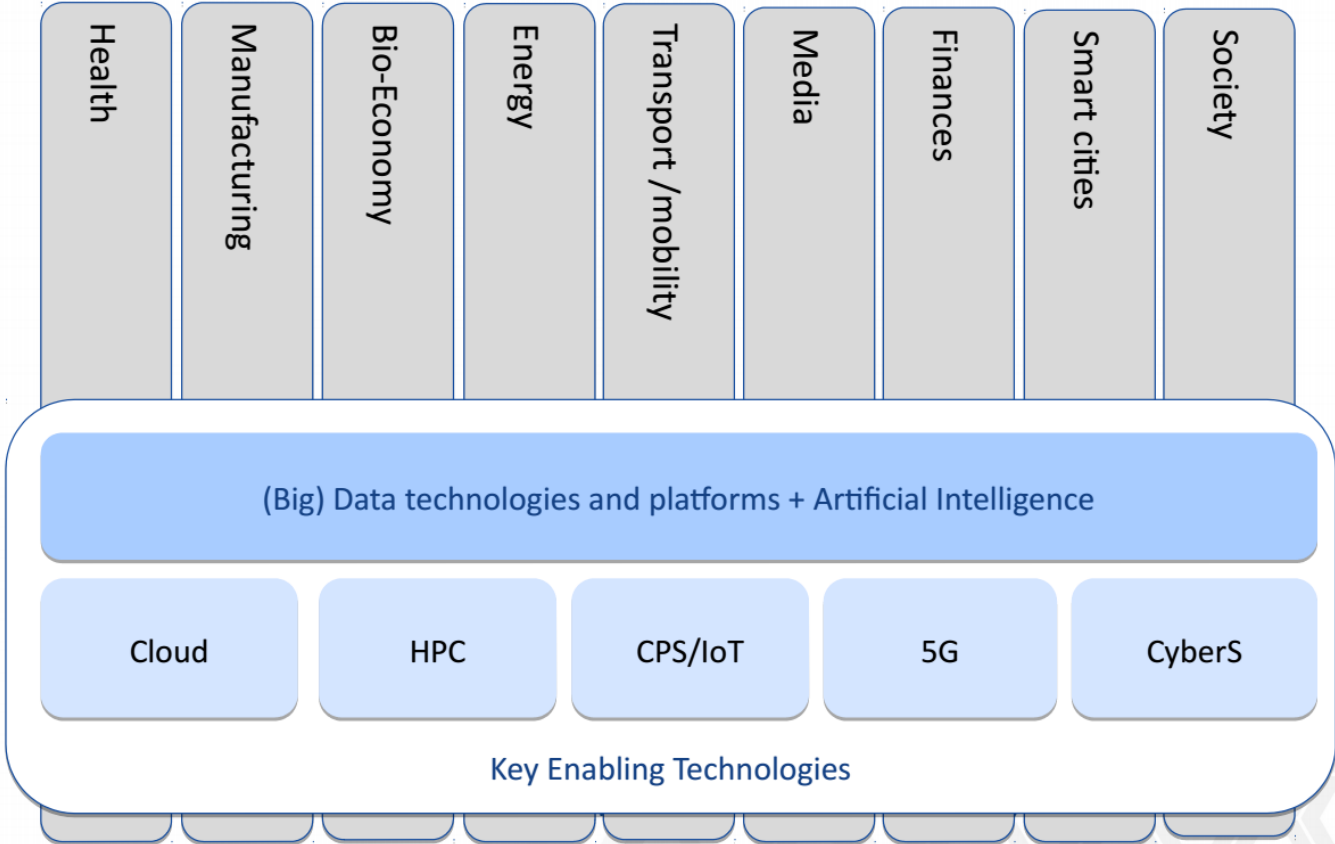
BDVA Innovation Spaces (i-Spaces)

- Train & educate employees to make use of Big Data technologies and build on data expertise
- Provide master level students with industrial problems and specific data

- Support SME uptake in digitizitaion
- Offer services for cultural heritage and local governments
- Provide digital solutions for policy development

- Provide templates for data provision contracts
- Consult on internal secure data management process and architecture

- Create new data-driven business models
- Identify new business opportunities with already existing data
- Proof of impact and ROI

- Provide infrastructure for testing got SME and assistant on implementation of technologies for large industries
- Give advice on architecture and security of workspace and tool implementation
- Offer help-desk support

- Build precompetitive application
- Develop (visual) analytics tool set for specific domains

BDVA labelled i-Spaces

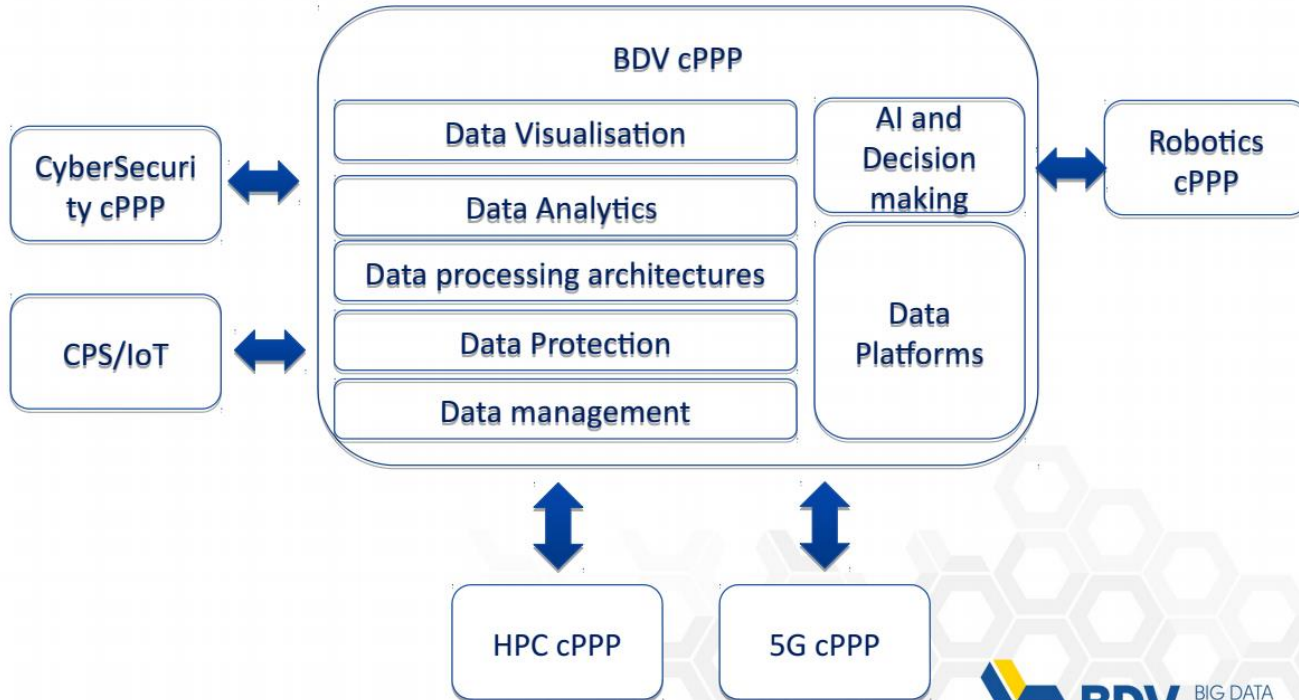| Country	Initiative Name	BDVA label
ES	Big Data Centre of Excellence Barcelona	SILVER
IT	Cineca	SILVER
AUT	Know-Center	SILVER
SE	RISE SICS North ICE	SILVER
DE	Smart Data Innovation Lab	SILVER
FR	Teralab	SILVER
NL	EGI Foundation	BRONZE
ES	ITI Big Data Space	BRONZE

Overview BDVA Standardization

- Leveraging existing standards for an open and successful Big Data market.
- Integrating national efforts on an international (European) level as early as possible.
- Ensuring availability of experts to support standardization process.
- Educational material to promote developing standards.
- Reference Architectures
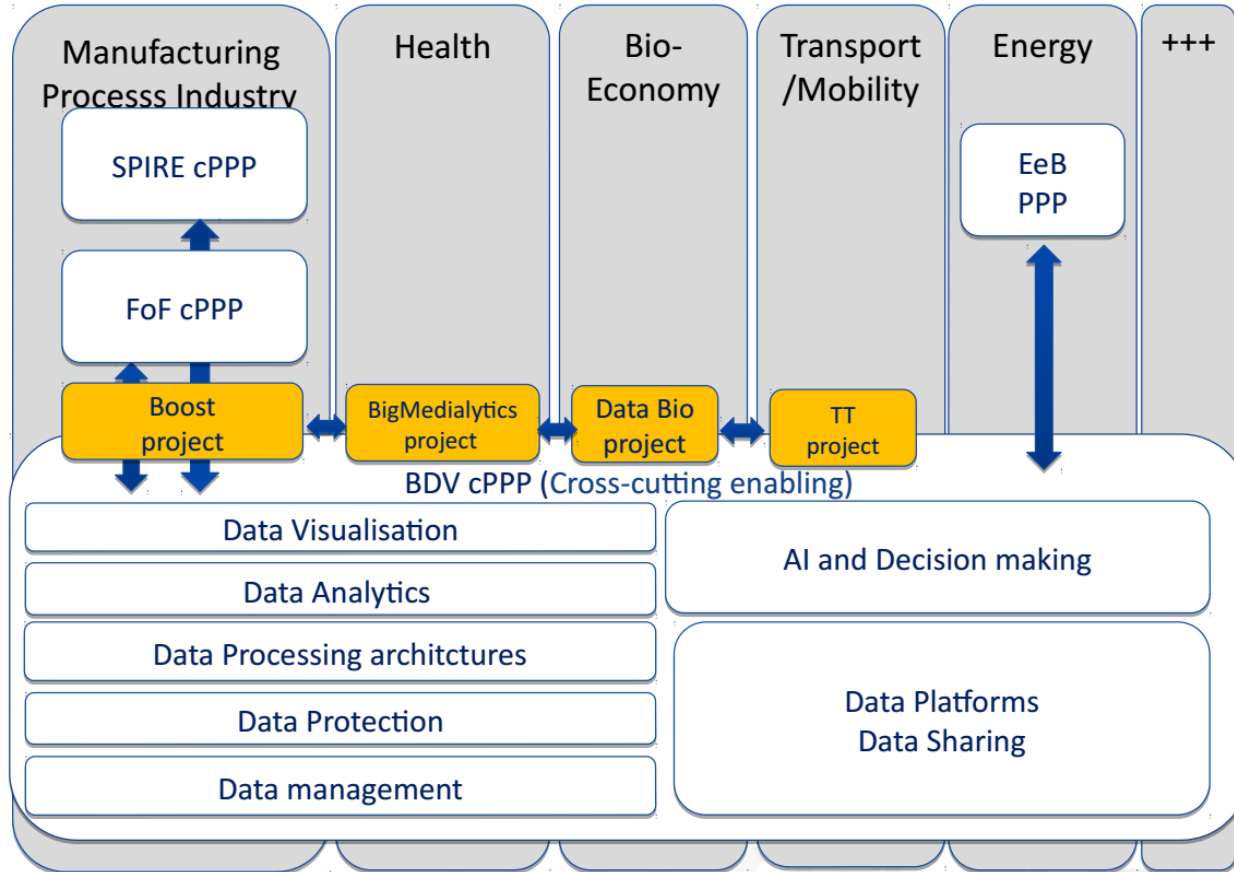- Interoperability of technologies and data
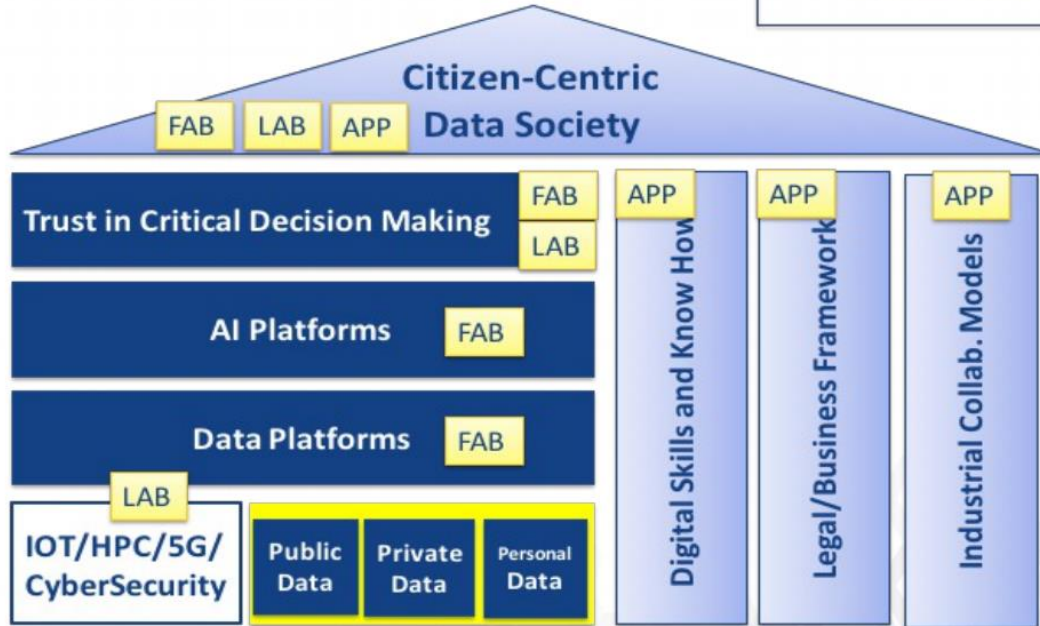- Security,Privacy & Anonymization

Key enabling technologies and sectors

Health | Manufacturing | Bio-Economy | Energy | Transport /mobility | Media | Finances | Smart cities | Society

(Big) Data technologies and platforms + Artificial Intelligence

| Cloud | HPC | CPS/IoT | 5G | CyberS |

Key Enabling Technologies

Big Data in collaboration with other horizontal PPPs

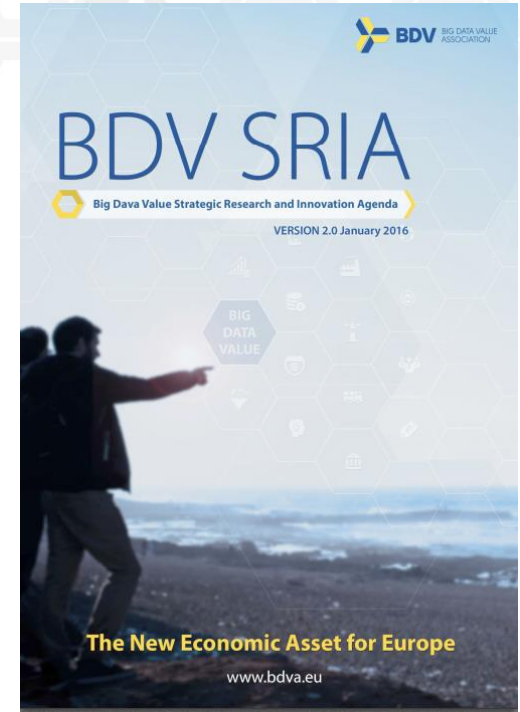BDVA Position next Framework programme

NEW SRIA CONTENT

What is the SRIA?
Strategic Research and Innovation Agenda

What is the SRIA?

› The Strategic Research and Innovation Agenda (SRIA) defines the overall goals, main **technical and non-technical priorities**, and a **research and innovation roadmap** for the European contractual Public Private Partnership (cPPP) on Big Data Value.

› The SRIA explains the strategic importance of Big Data, describes the Data Value Chain and the central role of Ecosystems, details a vision for Big Data Value in Europe in 2020, analyses the associated strengths, weaknesses, opportunities and threats, and sets out the objectives and goals to be accomplished by the cPPP within the European research and innovation landscape of Horizon 2020 and at national and regional levels.

Previous Version

› Big Data Value Strategic Research and Innovation Agenda (**BDV SRIA**) version 3.0 was **published** by BDVA in January 2017 (resulting from **several iterations and consulting processes)**

BDV SRIA

Big Dava Value Strategic Research and Innovation Agenda
VERSION 2.0 January 2016

BIG DATA VALUE

The New Economic Asset for Europe

www.bdva.eu

SRIA Update

1 **SRIA is a consensus reflecting document**

> The update process of the SRIA is a community-driven process

2 **It's a data-driven Process**

> Survey results gives us the quantitative rationale for **changing or keeping the SRIA**

3 **SRIA document is domain agnostic**

> Any technical or non-technical priorities are argued without reference to particular domains

4 **Descriptive of the Problem**

> SRIA document describes and motivates the problem but does NOT provide details about possible solutions

SRIA Update in 2017: Objectives

1. Publish an overview of all content and papers, positions, studies, etc. produced by BDVA with a reference to where to the actual storage location (public vs. private)

2. Give an overview of all ongoing BDVA activities with other PPPs, ETPs, etc.

SRIA Main changes

Section about I-Spaces
› Integration of contribution to Digital Innovation Hub discussion
› Integration of contribution submitted to Work Program

Update of Technical Priorities
› TF6-SG1: Data Management
› TF6-SG2: Data Processing Architectures
› TF6-SG3: Data Analytics
› TF6-SG4: Data Protection and Pseudonymisation Mechanisms
› TF6-SG5: Advanced Visualisation and User Experience

Section Platform Building
› HPC-BDVA
› EOSC Initiative (European Open Science Cloud)
› Cyber security
› EFFRA (European Factories of the Future Research Association)
› IoT

Sections about Cross-Domain Topics
› Personal Data Platforms
› Industrial Data Space (IDS)
› Cross-domain data processing requirements
› How relates BDV to Artificial Intelligence (AI)

New small Sections
› Digitizing European Industry (DIE)
› High Performance Computing (HPC)
› Digital Skills

Look at http://www.big-data-value.eu/projects/

Support, industrial skills, benchmarking and evaluation (ICT-17)

Support the implementation of the Big Data Value PPP

www.big-data-value.eu

Cross-sectorial and cross-lingual data integration and experimentation (ICT-14)

Enabling the European Business Graph for Innovative Data Products and Services

http://eubusinessgraph.eu/

Accelerating Data to Market

https://datapitch.eu/

Supporting Event and Weather-based Data Analytics and Marketing along the Shopper Journey

http://www.ew-shopp.eu/

Because Big Data Integration is Humanly Possible

http://qrowd-project.eu/

Understanding Europe's Fashion Data Universe

https://fashionbrain-project.eu/

Exploiting Oceans of Data for Maritime Applications

http://www.bigdataocean.eu/site/

Advanced Big Data Value Chain for Public Safety and Personal Security

http://www.aegis-bigdata.eu/

Scalable Linking and Integration of Big POI data

http://www.slipo.eu/

BDV BIG DATA VALUE

BDV PPP projects (H2020-ICT-2016-2017)

New projects 2017 (I/II)

PROJECT TITLE	SECTORS
European Data Incubator	Business Incubator for Data Businesses
Big Data for Mobility Tracking Knowledge Extraction in Urban Areas	Transport, mobility, insurance and health.
Big Data for Medical Analytics	Healthcare data and related policies.
High-performance data-centric stack for big data applications and operations	Maritime, market and financing test domains
Polyglot and Hybrid Persistence Architectures for Big Data Analytics	Automotive, earth observation, banking and motorway operation.
Edge and CLoud Computation: A Highly Distributed Software Architecture for Big Data AnalyticS	Automotive. Traffic management in smart cities and advanced driving assistance.
API-ecosystem for cross-sectorial exchange of 3D personal data	Healthcare, Manufacturing of commercial goods (eg t-shirts)
Building the Legal Knowledge Graph for Smart Compliance Services in Multilingual Europe	Legal and regulatory data for cross-border trading and localisation
Enabling procurement data value chains for economic development, demand management, competitive markets and vendor intelligence	Transparency and management of government and private procurement spendings.

New projects 2017 (II/II)

PROJECT TITLE	SECTORS
European Extreme Performing Big Data Stacks	Healthcare, financial, construction and security test domains.
Evidence Based Big Data Benchmarking to Improve Business Performance	Benchmarking.
Big Data Value Spaces for COmpetitiveness of European COnnected Smart FacTories 4.0	Smart, digital factories and manufacturing companies.
FAke News discovery and propagation from big Data ANalysis and artificial intelliGence Operations	Fake news identification. Focus on climate, immigration and European contexts.
Big Data to Enable Global Disruption of the Grapevine-powered Industries	Wine, natural cosmetics and grapevine economy.
Industrial-Driven Big Data as a Self-Service Solution	Banking, manufacturing and telecommunications test domains.
Aviation-driven Data Value Chain for Diversified Global and Local Operations	Aviation industry.
Ecosystem for Services based on integrated Cross-sectorial Data Streams from multiple Cyber Physical Products and Open Data Sources	Automotive, home automation