

**I-BiDaaS** aims to empower users to easily utilize and interact with big data technologies, by designing, building, and demonstrating, a unified framework that: significantly increases the speed of data analysis while coping with the rate of data asset growth, and facilitates cross-domain data-flow towards a thriving data-driven EU economy.

**I-BiDaaS** will be tangibly validated by three real-world, industry-lead experiments.

## AT A GLANCE

### Project title

Industrial-Driven Big Data as a Self-Service Solution

### Project Coordinator

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### Duration

36 Months (January 2018 – December 2020)

### Total Cost

€4.997.035

### Web site

<https://www.ibidaas.eu/>

### Consortium

- FOUNDATION FOR RESEARCH AND TECHNOLOGY HELLAS (**FORTH**)
- BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION (**BSC**)
- IBM ISRAEL - SCIENCE AND TECHNOLOGY LTD (**IBM**)
- CENTRO RICERCHÉ FIAT SCPA (**CRF**)
- SOFTWARE AG (**SAG**)
- CAIXABANK, S.A (**CAIXA**)
- THE UNIVERSITY OF MANCHESTER (**UNIMAN**)
- ECOLE NATIONALE DES PONTS ET CHAUSSEES (**ENPC**)
- ATOS SPAIN SA (**ATOS**)
- AEGIS IT RESEARCH LTD (**AEGIS**)
- INFORMATION TECHNOLOGY FOR MARKET LEADERSHIP (**ITML**)
- University of Novi Sad Faculty of Sciences Serbia (**UNSPMF**)
- TELEFONICA INVESTIGACION Y DESARROLLO SA (**TID**)

## Concept

Organizations leverage data pools to drive value, while it is variety, not volume or velocity, which drives big-data investments. The convergence of IoT, cloud, and big data, create new opportunities for self-service analytics towards a completely paradigm towards big data analytics. Human and machine created data is being aggregated, transforming our economy and society. To face these challenges, companies call upon expert analysts and consultants to assist them. A self-service solution will be transformative for organizations, it will empower their employees with the right knowledge, and give the true decision-makers the insights they need to make the right decisions. It will shift the power balance within an organization, increase efficiency, reduce costs, improve employee empowerment, and increase profitability.

## Objectives

**I-BiDaaS** will offer Big Data as a Self-Service to enterprises by allowing seamless integration and injection of streaming and batch heterogeneous data and facilitate the adoption of big data analytics to enterprises that possess big data but may not have in-house expertise to extract the required actionable knowledge.

**I-BiDaaS** objectives are:

- **Obj.No.1:** Develop, validate, demonstrate, and support, a complete and solid big data solution that can be easily configured and adopted by practitioners;
- **Obj.No.2:** Break inter and intra-sectorial data-silos, create a data market and offer new business opportunities, and support data sharing, exchange, and interoperability;
- **Obj.No.3:** Construct a safe environment for methodological big data experimentation, for the development of new products, services, and tools;

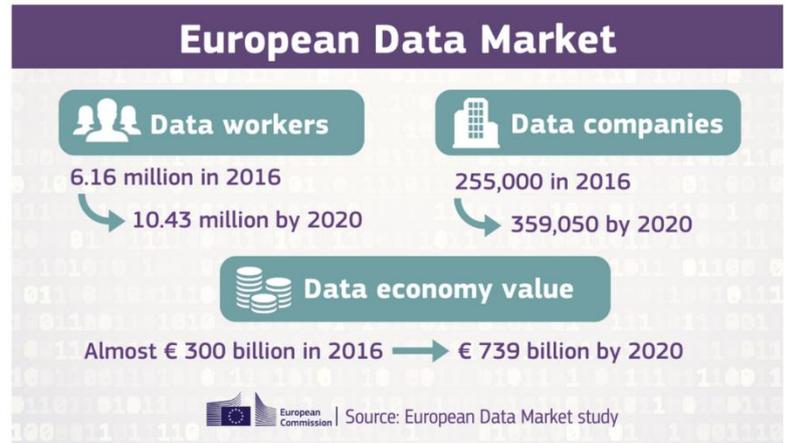
- **Obj.No.4:** Develop data processing tools and techniques applicable in real-world settings, and demonstrate significant increase of speed of data throughput and access;
- **Obj.No.5:** Develop technologies that will increase the efficiency and competitiveness of all EU companies and organisations that need to manage vast and complex amounts of data

### The EU Data Economy and the link to I-BiDaaS

Data Economy is an integral part of the Digital Single Market strategy of the European Commission, and as such, it is considered as an essential resource for growth, competitiveness, innovation, job creation and societal progress in general. It is however widely acknowledged by the industry that many companies continue to struggle to turn opportunity from big data into realized gains. There is little actual knowledge on how organisations translate the potential of big data into actual economic and social value.

Moreover, relevant to **I-BiDaaS** is the debate on algorithmic and human-based intelligence and in particular the acknowledgement that when processing and interpreting data, human actors can be influenced, for example, by time constraints and scepticism with regard to relying on data; team compositions; visualizations of input and output; relational versus analytic and evidence-based mind sets, and historical insights. To mitigate such influences, scholars and practitioners have begun to explore the potentials of algorithms that are able to process big data at ever-increasing speeds.

In a nutshell **I-BiDaaS** will deliver a full array of big data business analytics solutions for structured, unstructured, noisy data for companies in multiple industries (finance, telecom and automotive) that are more accessible, cost-effective and employee-empowering than existing solutions, which gives companies the confidence to deploy Big Data Self-Service solutions across the organisation, from consumer-facing employees with little IT experience or expertise to top.



### I-BiDaaS demonstrators and industrial impact

To demonstrate and validate I-BiDaaS solution, three industrial-validated and real-life experiments will be executed:

- the usage of big data to enhance control of third parties in the banking sector (**CAIXA**);
- the management of inbound logistics, internal logistics, and quality control in the automotive sector (**CRF**), and
- use of big data for accurate location prediction with high traffic and visibility, to employ bots in call centres and optimize the placement of telecommunication equipment (**TID**).

**Impact in the banking sector:** provide a significant boost by enabling banks and financial industries exploit their big data efficiently and therefore increase their market share and services provided to their customers.

**Empower the automobile industry:** automotive market has tremendous potential through the exploitation of big data analytics tools and services. The Big Data as a Self-Service approach will set the grounds for even easier and massive big data exploitation in these industries.

**Impact in the telecom sector:** As it is evident, telecom data can scale to very large volumes, have a high level of complexity with respect to variety, and they arrive with high velocity. **I-BiDaaS** is expected to provide a significant boost by providing its tools and services based on the Big Data as a Self-Service approach.

### Use cases

No.	Use Case	I-BiDaaS dataset	Partner owner (Domain)
1	Accurate location prediction with high traffic and visibility	Real mobility data; Synthetic mobility data	TID (Telecommunications)
2	Optimization of placement of telecommunication equipment	Real mobility data; Synthetic mobility data	TID (Telecommunications)
3	Employment of bots in call centre	Synthetic call center data	TID (Telecommunications)
4	Enhance control over third party agencies	Third parties control synthetic data	CAIXA (Banking)
5	Advanced analysis of bank transfer payment in financial terminal	Bank transfer synthetic data	CAIXA (Banking)
6	Analysis of relationships through IP address	IP address synthetic data	CAIXA (Banking)
7	Building of a social graph	Social graph synthetic data	CAIXA (Banking)
8	Maintenance and monitoring of production assets	SCADA data; MES data	CRF (Manufacturing)
9	Production process of aluminium casting	Teksid data	CRF (Manufacturing)

