



## **AI-CUBE**

Full Title: Artificial Intelligence and Big Data CSA for Process Industry Users, Business Development and Exploitation

## Aim:

The AI-CUBE project aims to enhance the understanding of digital technologies related to Artificial Intelligence and Big Data applied in process industries for eight SPIRE industrial sectors. AI-CUBE will define eight roadmaps, one for each SPIRE sector, highlighting practical recommendations on Artificial Intelligence (AI) and Big Data (BD) business cases that will serve as guidance for researchers, managers, and operators.

## Concept:

The AI-CUBE concept is based on a tri-axial mapping of AI and BD technologies, which will allow to map and visualize the status of the use of these technologies and their penetration in each SPIRE sector (cement, ceramics, chemicals, engineering, minerals and ores, non-ferrous metals, steel and water) and for each macroapplication- process areas (e.g., R&I management and planning, process control, supply chain management, predictive maintenance, and product customization). The 'Cube Concept' allows to set the stage for the development and integration of four key sets of results: - A novel AI and BD Maturity Level Assessment framework to support companies in evaluating the level of implementation of technologies. - The CUBE, to be used as mapping tool by industries to assess their state of advancement in the penetration of digital technologies in the sector. - A set of inspirational Al and BD Business Cases and an Al-CUBE Business Model Game. - A set of eight sectoral roadmaps including easy to consult Infographics.

Start date:

01/09/2020

End date: 31/08/2022