

"HYPERBOREA SRL - Coordinatore  
Progetto finanziato  
nel quadro  
del POR FESR Toscana 2014-2020"

"HYPERBOREA SRL - Coordinator  
Project co-financed  
underTuscany  
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Manufacturing companies, developing complex products and / or managing large plants, produce a significant flow of data and information throughout all their own productive processes, from acquisition, to production and maintenance of the products themselves.

A relevant part of these data consists of texts, graphics and images obtained as a transposition of the know-how of human personnel, which is at the center of all production processes.

The quick and easy collection and retrieval of all these data and information is vital to speed up internal business operations. For example, during the design phases of a new product, it is useful to identify, in past projects, specifications, data and information contained in lessons learned, in risk analyzes, etc. to carry out more reliable and innovative design activities.

In the case of large systems maintenance, it is valuable for operators to have immediate access to the information needed to carry out their activities quickly and effectively. In addition, the tasks of tracking and recording information are essential for the certification of the interventions performed.

Finally, in current industrial scenarios where companies competition is also based on their offer quality level, another crucial aspect is represented by testing activities, whose effectiveness depends on the correct management of available data and information.

Manufacturing companies needs, as pointed out above, however, confront the complexity of knowledge management, due to both the large amount and to the heterogeneity of the data and documents to be processed. Currently available technological tools are not able to meet this challenge and to effectively meet these needs.

In this context, our goal is to design and to develop a platform aiming at innovating the production process from an Industry 4.0 perspective. The platform of the present ADA project will be based on big data analytics systems, to properly address these critical issues. It will allow the acquisition, organization and smart retrieval of information from technical texts and images, in the different phases of the product production cycle.

The main innovative features that will be offered are: assisted compilation of project documentation, combined analysis of texts and images, automatic extraction of information from technical documents, product cycle certification guaranteed by blockchain, testing automation and predictive maintenance.

## Partnership



**Le ali alle tue idee**