

DAP FEDER

The FEDER project aims at developing and deploying a Data Analytics Platform or DAP (hardware, software, people) supporting advanced services answering to internal needs of the LIST as well as external stakeholders needs



Inspiration

In the new digital economy, data analytics facilities are cornerstone for creating and delivering value associated with these data. In the Big Data world, a next generation of advanced facilities is required. They should be based on enhanced computational and in-memory processing capabilities (HPC) as well as on new analytics able to cope with the so-called 5 V's challenges associated with data management: Volume (large volumes of data generated), Variety (multiple sources, types and formats of data), Velocity (the speed at which new data is generated and the speed at which data changes), Veracity (the correctness and accuracy of information), Value: (the ability to turn data into value).

The data analytics technologies are based on combinations of several analytical tools from different research/technological domains such as Operations Research, Artificial Intelligence, Business Intelligence...

Innovation

In the period 2016-2019, LIST will develop, deploy and maintain a Data Analytics Platform or DAP (hardware, software, people). The aim is to establish a hybrid infrastructure (cloud + in-house), the in-house part being necessary for progressively acquiring the needed competences and also taking care of all aspects related to the privacy and national regulations associated with data. In parallel, the objective is to run use cases provided by the internal and external stakeholders and then, to develop the business model for such a mutualised platform with the stakeholders interested in that project.

The Data Analytics Platform will be an instrument, integrating LIST RDI activities related to the development of Smart Systems in different domains (data science for environmental and biotechnological applications, business analytics, etc.). In this context, LIST experts are developing specific business analytics associated with smart organizations. Other R&I institutes, like for example the Luxembourg Center for Systems Biomedicine (LCSB), the Luxembourg Institute of Health (LIH) and the Luxembourg Institute of Socio-Economic Research (LISER) have interests in using state-of-the-art DAP for their Big Data.

"Big Data" represents important opportunities for many industries and sectors in terms of exploitation for improving and predicting their operations, and, possibly, developing new associated business offerings. Those R&I institutes as well other organizations support the project.

Impact

An impact for LIST will be that the activities developed as part of DAP FEDER will strengthen the data analytics facilities made available to the institute in terms of Big Data exploitation for innovation purposes, as well as making possible for the institute to do research regarding new advanced analytics components associated with its domains. Successful results would position LIST as a truly leader in Europe through real differentiation in an integrated HPC-Data Analytics.

At a national level, the project will provide a state-of-the-art infrastructure and high level capabilities to the Luxembourgish RDI institutions. The impact will also be instrumental regarding the exploitation of the future HPC providing advanced processing facilities. DAP FEDER aims at delivering added-value (co-designed) services to external public and private customers.

Financial Support

European Regional Development Fund (ERDF)

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