

Treviglio (BG), October 29, 2020

TRACTORS "DIALOGUE" IN THE CLOUD FOR AGRICULTURE 4.0

SDF provides new services to its clients with the new SDF Data Platform enabled by IBM Watson IOT Platform and IBM Cloud technology developed in collaboration with Cefriel. Objective: to use the information collected by the platform to improve operational efficiency and planning of agricultural crops.

SDF, one of the world's leading manufacturers of tractors, harvesting machines and diesel engines, today announced the introduction of SDF Data Platform, an innovative platform developed by Cefriel, partner of digital innovation with Internet of Things know-how, and leverages IBM Watson IOT Platform capabilities. The new data platform supports SDF's mission to improve the efficiency and the predictive maintenance of tractors, and the results of the entire production cycle of agricultural activities.

In everyday personal and working life we are now used to being surrounded by connected objects and to exchange data and information through various mobile devices. Even a "traditional" area such as agriculture can benefit from the new potential offered by digital technology.

For this reason, SDF has started a project to transform the product vision. Tractors and harvesting machines, in addition to providing mechanical, hydraulic and electrical power, will also provide the digital connection to the SDF Data Platform, becoming a hub for data collection. These data, suitably processed, aggregated and stored on SDF Data Platform, allows to provide new services / products to the end customer. The key point in defining the platform was to create an open ecosystem, to connect different data sources in order to create an interoperable system that can be easily used by the end customer.

In this scenario of pervasiveness of the IoT, SDF has developed in collaboration with Cefriel a digital cloud infrastructure, based on the advanced artificial intelligence capabilities of the Watson IoT Platform and the flexibility of IBM Cloud, capable of collecting, storing, processing and sharing data from connected vehicles.

The data collected will improve operational efficiency and agricultural crop planning. And it will provide farmers with timely visibility into vehicle usage and operating status to anticipate failures or malfunctions that could result in reduced productivity.

The initiative concerns both new production vehicles, natively equipped with a control unit with connectivity, and the existing fleet, through available *aftermarket* solutions.

In addition, by leveraging data collected from connected vehicles, SDF will be able to offer new value-added services such as predictive maintenance, fleet management and precision farming. This will, for example, allow a constant monitoring of vehicle performance and the ability to make changes or adaptations in a timely manner.

Being able to collect data not only from tractors, but also from connected implements and sensors in the field, further enriches the opportunity for SDF to offer additional services for the end customer, for example, with respect to the type of work in progress and the conditions under which it is carried out.

Finally, the possibility to share the data collected with digital farming applications developed by third parties allows SDF vehicles to be integrated in a multi-vendor scenario: a further added value for the end customer, considering the presence in many farms of machines of different manufacturers not yet enabled to "dialogue" among them.

*"Thanks to the support of Cefriel and IBM Cloud - underlines **Massimo Ribaldone, SDF R&D Executive Director** - we are working to create new digital services dedicated to the end customer, with a view to Smart Farming, Agriculture 4.0, Fleet Management and Predictive Maintenance. The goal is to add to our 'core' products, tractors and harvesting machines, a set of integrated services and functionalities to improve the management and performance of our customers' businesses".*

*"The digital solution developed for SDF - comments **Alfonso Fuggetta, CEO of Cefriel**, who recently obtained from MISE the certification as Technology Transfer Center 4.0 (CTT 4.0) - represents an important step to introduce, in a traditional sector such as agriculture, a path of innovation along the value chain of data by introducing the necessary innovations both to offer new business services and to promote an increasingly sustainable development of crops with less waste and inefficiency".*

*"The main challenge on which to concentrate a large part of our resources, the pandemic has taught us, is that of sustainable innovation, be it economic, social, health or environmental. The levers with which to face and overcome this challenge are undoubtedly those offered by technology and adequately trained human capital. Even a sector with a millenary tradition such as agriculture can today be improved and made more efficient thanks to these two levers. SDF has been able to grasp the need for innovation required by the market, promoting a transformation path to Data Driven Company that has involved the whole company". - said **Stefano Rebattoni, Vice President Enterprise Sector IBM Italy** - "IBM continues, also with this project, to accompany Italian companies in their path of digital reinvention, allowing greater efficiency in processes and a better quality of their customer experience".*



About:

Cefriel

Cefriel is a consortium company owned by universities, businesses and public administrations that has been operating in the field of innovation, research and training since 1988 with the aim of building a bridge between the present and the future of businesses. Cefriel accompanies clients in the full realization of their specific potential, supporting them in different business paths, in order to make them grow, accelerate their competitive development and promote their human capital.

Cefriel represents a "value innovation partner". Through an approach that combines new business models, technology and training in end-to-end solutions, Cefriel empowers customers to develop valuable innovations to achieve a dual objective: to achieve a truly distinctive competitive advantage while optimizing costs.

The original consortium spirit is preserved in its non-profit corporate form. Its members are four universities (Politecnico di Milano, Università degli Studi di Milano, Università degli Studi di Milano-Bicocca, Università degli Studi dell'Insubria), Regione Lombardia and over 15 large companies from various sectors including, for example, Microsoft, TIM, ENI, Pirelli and, since March 2017, "The European House - Ambrosetti".

Cefriel adopts a multidisciplinary approach in the implementation of projects. The working groups integrate within them technical, design and business skills and experience, coming both from the university and research world and from the ICT world (hardware, software, telecommunications) and from the customer's sector of interest.

SDF

SDF, whose main headquarters is in Treviglio (BG), is one of the world's leading manufacturers of tractors, harvesters and diesel engines. Its products are distributed under the brands SAME, DEUTZ-FAHR, Lamborghini Trattori, Hürlimann and Grégoire. The tractor range is offered with powers from 25 to 336 HP, while the harvester range comes with powers up to 395 HP.

SDF has 8 production plants, 12 commercial branches, 2 joint ventures, 155 importers and over 3,100 dealers worldwide and a global workforce of more than 3,800 employees. In 2019, the company recorded a revenue of €1,268 million, with an EBITDA of 8.7%.

<http://www.sdfgroup.com>

IBM

With 109 years of history, IBM is a leader in innovation serving businesses and institutions and operates in 170 countries. It offers access to exponential technologies such as AI, cloud, hardware systems, blockchain, cybersecurity, quantum computing and consulting services for the digital transformation of business models. IBM is also recognized for its strong ethical commitment to the market and the social context in which it operates. In addition, it allocates approximately \$6 billion per year to research.