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Grupa Azoty and Microsoft announce a strategic partnership to use cloud and artificial intelligence in agriculture

Grupa Azoty and Microsoft have signed an agreement to use the cloud technology in, among others, precision agriculture, fostering technological initiatives that change the manufacturing sector, and expanding the competencies of the Group's employees. Computational power and advanced analytics will enable the implementation of more effective measures aimed at optimising Grupa Azoty's business and driving sustainable development of the organisation.

Grupa Azoty, one of the key groups in the fertilizer and chemical industry in Europe, is undertaking activities aimed at transforming the manufacturing sector and developing the competencies of its staff. Thanks to Microsoft's cloud computing capabilities, Grupa Azoty will be able to minimise the environmental impact of its operations. In addition, a technology incubator opened in collaboration with Microsoft Technology Center will prototype solutions for even faster evolution of the entire fertilizer and chemical sector in Poland and Europe.

The basis of the collaboration is the approach to digital transformation that encompasses two dimensions – human and technological. This will allow not only to react to the growing competence gap on the market, but also to strengthen the organization's culture in line with a modern approach to the use of technology. The potential and possibilities offered by the cloud model and the technologies developed on its basis will also make it possible to implement innovations such as satellite farming or accurate analysis of all processes in a business. The solutions implemented in this way will set the direction for the entire sector.

"Artificial intelligence is a step towards greater efficiency and reduced operating costs. We cannot imagine increasing our competitiveness without innovative solutions relying on artificial intelligence. Precision farming systems, which enable farmers to plan an appropriate crop fertilization strategy, are one of the measurable effects of implementing innovative technologies at Grupa Azoty. I believe that the agreement we have signed

will open up for us new opportunities and markets as regards the use of new technologies," said Tomasz Hinc, President of the Grupa Azoty S.A. Management Board.

"As the Ministry of State Assets, we have no doubt that artificial intelligence is one of the major trends on the road to digital transformation of business. The news of the cooperation between Grupa Azoty, one of the leading groups players in the European fertilizer and chemical industry, and Microsoft confirms that our national champions are very well aware of the importance of modern technologies in the context of building their competitive advantage. I am convinced that the joint efforts of Grupa Azoty and Microsoft will set the direction for the digital transformation of the fertilizer and chemical industry in Europe," said Andrzej Śliwka, Undersecretary of State in the Ministry of State Assets.

A digital culture of change

The optimum use of technology requires appropriate competencies, especially in specialized industries such as the manufacturing and chemical sectors. For this reason, one of the key elements of the cooperation agreement is a project to strengthen the culture of innovation at Grupa Azoty, supported by the implementation of appropriate tools and training for company IT specialists, for example in Microsoft 365. The Grupa Azoty IT team will also join the Enterprise Skills Initiative, a programme run by Microsoft to create experts with the highest skills in cloud computing.

"Digital transformation starts with people. Technology actually comes along. In order to grow the digital economy in Poland, we need to make sure that employees have access to appropriate technologies and have the knowledge and map to help them navigate this realm. It is a crucial moment for us to see a company of such scale and market presence join the group of innovators from the Polish Digital Valley, a company which for years has been setting directions for action and development in the sector at the European level," said Michał Gołębiowski, Member of the Microsoft Poland Management Board.

Incubator for startups, that is projects that will transform the industry

Under the signed agreement, Grupa Azoty, supported by Microsoft and Microsoft Technology Center experts, will launch an incubator for startups – technological initiatives at an early growth stage, centred around the chemical industry. Moreover, the use of Innovation Alley and Microsoft Technology Center will allow the teams of both companies and young entrepreneurs to hold strategy sessions and prototype new solutions in a highly innovative environment, as well as jointly develop their competencies using cloud computing.

"At Grupa Azoty, we attach a lot of importance to cooperation with startups. Expanding our eco-innovation system to include artificial intelligence solutions will significantly improve the efficiency of implemented projects. We have no doubt that artificial intelligence is the future of business. Collaboration with Microsoft allows us to set trends and development directions for digitalization of the fertilizer and chemical industry," said Grzegorz Kądziałowski, Vice President of the Management Board of Grupa Azoty S.A.

Sustainable development measured with petabytes of data

Projects undertaken in order to meet climate targets is now one of the greatest challenges facing industry. Grupa Azoty consistently implements projects that are in line with the EU climate policy. These include precision agriculture projects that fit with the European Commission's key objective in the agro area, that is improvement of the effectiveness of fertilizer application. To this end, the Group implements systems helping identify nutrient deficiencies in soil and, as a result, select the best fertilizers to meet current crop needs.

In response to environmental challenges, another area of joint efforts by Grupa Azoty and Microsoft will be to leverage the opportunities offered by advanced data analytics in projects designed to mitigate environmental impacts. This is all the more important for the company which for years has been one of the leading groups in the fertilizer and chemical industry. Another aspect of using data is the possibility of developing predictive models based on implemented statistical methods. Their purpose is to manage the risk of production unit failure and to identify the effect of the unit operating parameters on product quality.

Soil grains seen from space

One of the areas of cooperation between Microsoft and Grupa Azoty will also be the development of satellite imaging techniques used in precision agriculture based on cloud computing. Ground-breaking solutions in non-invasive soil analytics using satellite data will support Grupa Azoty customers in a wide-ranging optimisation of agricultural crop management.