

News Release

Bayer AG Communications 51368 Leverkusen Germany Phone +49 214 30-1 www.bayer.com/en/media

# Bayer collaborates with Microsoft to unveil new cloud-based enterprise solutions, advancing innovation and transparency in the agri-food industry

- Ready-to-use AgPowered Services from Bayer running on the new Microsoft Azure Data Manager for Agriculture
- Readymade capabilities and robust digital infrastructure allow innovators to focus on differentiated value
- Companies, farmers and consumers share value through better connected solutions and increased supply chain transparency that support sustainable agriculture and food production
- Azure Data Manager for Agriculture to become the largest connection point of agricultural data and services, accelerating innovation, breaking down data silos and driving interoperability across the value chain – including food, feed, fiber and fuel

San Francisco / California, March 14, 2023 – Following a 2021 strategic partnership announcement with Microsoft, Bayer today launched new cloud-based solutions for the agri-food industry: AgPowered Services from Bayer in combination with the new Microsoft Azure Data Manager for Agriculture provide ready-to-use capabilities available for businesses and organizations from start-ups to global enterprises to license and use for their own internal or customer-facing digital solutions.

For example, companies that develop on-farm technologies can build on the new cloud infrastructure and core capabilities from Microsoft (Azure Data Manager for Agriculture) and license additional capabilities from Bayer (Bayer AgPowered Services) to build digital tools that support favorable agronomic outcomes for growers. Similarly, consumer goods companies can use the cloud offerings to build solutions that provide insight into nutrients, sustainability, and production practices to build trust with consumers, stakeholders and investors.

Azure Data Manager for Agriculture combines decades of Bayer's agricultural expertise with Microsoft's cloud solutions, advancing the industry through readymade capabilities and robust infrastructure that allow innovators to focus on differentiated value. After initial preview starting today allowing for customer exploration of both the Azure Data Manager and AgPowered Services, full commercial availability will be announced at a later date.

"Only innovation can ensure global food security while protecting the planet. Modern agriculture and food production generate a tremendous amount of valuable data that can drive productivity and sustainability," said Dr. Robert Reiter, Head of R&D for Bayer's Crop Science Division. "However, this data is often disconnected, not useable throughout the value chain, and the costs to build digital solutions from scratch are high. Our new cloud-based solutions help overcome these challenges. Customers can use the infrastructure and capabilities to build their own digital solutions and products on top of the most robust collection of ag data in the world."

These cloud offerings also support an ecosystem that allows for greater transparency along the whole food production value chain. This transparency, enabled through end-to-end interoperability, would make it easier for consumer goods companies to partner with growers based on how crops are raised and help consumers make more informed purchasing decisions based on origin practices. The potential to support sustainable agriculture and food production can ultimately benefit companies, farmers, consumers, and the planet.

"In order to enable a more sustainable future in agriculture, we must scale innovation which starts with data," said Ralph Haupter, President of Microsoft EMEA. "Our partnership with Bayer allows us to benefit from each other's experiences to empower organizations to address challenges in farming today."

In addition to using the platform to develop their own internal and customer-facing digital platforms, companies and organizations will have the ability to bring their own solutions to Azure Data Manager for Agriculture and make them available for licensing, similar to how Bayer is offering these initial AgPowered Services as add-ons to Azure Data Manager robust infrastructure and core capabilities:

- Bayer Imagery Insights Track crop health over time and quickly identify areas in fields that need attention through a series of satellite images and supporting data within individually selected geographic areas.
- Bayer Growing Degree Day Calculation Provide a calculation for Growing
  Degree Days, a critical input for models that focus on identifying key timing of
  variables affecting crop growth, health and output, as well as the emergence and
  development of important crop insect pests and diseases.
- Bayer Crop Water Use Maps Gain access to map layers and supporting data
  that help define the amount of water a crop is using or losing during a 24-hour
  period. Users will be able to understand crop evaporation and transpiration levels
  and potential crop loss areas due to lack of water, which is a key driver for
  irrigation planning.

Data models powering Bayer AgPowered Services are developed using publicly available data like weather information, remote sensing like satellite imagery, decades of rich agronomic data from Bayer research and market development efforts, as well as aggregated, anonymized, and enhanced data from Climate FieldView™, Bayer's leading digital farming solution with subscriptions across more than 220 million acres in over 20 countries. All cloud-based solutions are designed to meet or exceed global data privacy requirements, providing data storage on the world's most trusted cloud with leading security offerings.

Solutions built on Azure Data Manager can benefit farmers seeking to track disease, pest and weed pressure, apply precision inputs, identify crop growth and production patterns, measure potential yield, track and capture carbon emissions, and analyze heat stress impact, rainfall, hail and weather data. In addition to bringing the first AgPowered Services to the cloud offering, Bayer is using capabilities from Azure Data Manager to power insights in FieldView.

Using these cloud-based enterprise solutions, value chain partners will be able to apply insights into supply projections, sustainable sourcing, and ESG reporting. They will also be able to meet quickly changing consumer preferences for fresh, high-quality ingredients with data driven insights that allow for optimization of harvest, transport, and ripening processes as well as advanced traceability of food ingredients.

"This is an important step towards accelerating the impact of big data and agriculture. With high-quality data fueling insights, we expect to see a value chain that is more predictable, more transparent, and importantly, where value is shared all the way back to producers," said Jeremy Williams, Head of Climate and Digital Farming at Bayer's Crop Science Division. "This is how we incentivize sustainable business models to drive these regenerative agriculture ecosystem benefits, providing growers options to meaningfully connect with supply chains that start on their farms."

The partnership between Microsoft and Bayer is a significant, strategic step forward in accomplishing Bayer's ambitious target of 100-percent digitally enabled sales in its Crop Science division by 2030 and accelerating its ability to bring new value and deliver outcomes-based, digitally enabled solutions to farmer customers. Bayer is committed to setting a new standard for the industry in data-driven, digital innovation.

For more information, please check our website.

### **About Bayer**

Bayer is a global enterprise with core competencies in the life science fields of health care and nutrition. Its products and services are designed to help people and the planet thrive by supporting efforts to master the major challenges presented by a growing and aging global population. Bayer is committed to driving sustainable development and generating a positive impact with its businesses. At the same time, the Group aims to increase its earning power and create value through innovation and growth. The Bayer brand stands for trust, reliability and quality throughout the world. In fiscal 2022, the Group employed around 101,000 people and had sales of 50.7 billion euros. R&D expenses before special items amounted to 6.2 billion euros. For more information, go to www.bayer.com.

# Contact for media inquiries:

**Alexander Hennig, phone +49 175 30 89 736** 

Email: alexander.hennig@bayer.com

## Contact for investor inquiries:

Bayer Investor Relations Team, phone +49 214 30-72704

Email: ir@bayer.com

www.bayer.com/en/investors/ir-team

Find more information at www.bayer.com.

Follow us on twitter.com/bayer

ah (2023-0051E)

#### **Forward-Looking Statements**

This release may contain forward-looking statements based on current assumptions and forecasts made by Bayer management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Bayer's public reports which are available on the Bayer website at www.bayer.com. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.