

## **Omniolytics selects IBM Cloud and IBM Watson to improve food security for African poultry farmers**

*The startup is using IBM technology to build a digital farming platform that helps emerging and commercial farmers unlock new insights through the power of AI, Cloud and IoT.*

**Johannesburg, 24 June 2021:** IBM today announced that startup, Omniolytics, has turned to IBM to help transform poultry farming through digital platforms that use sensors and IBM Watson running in the IBM Cloud. Omniolytics develops smart farming solutions for emerging and commercial poultry farmers.

The local poultry industry today has a number of challenges ranging from the quality and origins of feeds, high feed prices and the recurrence of avian influenza and disease outbreaks such as listeriosis and salmonellosis.

Working with IBM, Omniolytics has developed a new approach that uses Internet of Things (IoT) technologies to collect data on the environmental conditions of production facilities and day-to-day management activities and processes of poultry to improve animal health, mitigate losses and assist producers in improving production efficiency, helping address food security concerns. The suite of solutions use IBM Watson and machine learning capabilities to identify and learn the typical behaviour of birds – and lead to improved management practices. Farmers are then able to receive a more complete picture of the wellbeing of their flocks delivered on IBM Cloud identifying processes and environmental deviations which could point to a potential problem.

The poultry industry was valued at over R46 billion in 2019 makes up over 16% of the total gross value of agricultural production in South Africa. In 2018, the avian flu outbreak alone cost the South African economy R954million. Omniolytics, is addressing the need for commercial and emerging poultry farmers in this valuable industry to make informed, real-time decisions on potential threats and forecast dangers within the broiler house facility and provides farmers with early warnings on potential issues - making their processes more efficient and improving production standards.

“Local farmers have to be enabled to be globally competitive and the best way to do that is through technology. IBM Cloud and AI ensures we have a platform to help farmers across South Africa use precision agriculture to enhance the efficiency of their production. We’re introducing solutions to the market which help improve feed conversion ratios, mortality and growth rates and benchmarking practices across their production facilities. This will ensure accurate future predictions across the value chain and make poultry farming more sustainable,” says Omniolytics founder, Michael Samson.

Omniolytics’ flagship solution, OmnioFarm is built on IBM Cloud and collects, processes, analyses, and visualises comprehensive insights collected from integrated wireless sensors, coupled with production records and activities across the production cycle.

DataViz, their foundation product, draws data from wireless sensors placed in the chicken broiler house to monitor the environmental conditions including air and water quality as well as lighting. These sensors will provide data via IoT platforms to the DataViz platform - digitally capturing facilities environmental conditions and production records while also scheduling activities, setting thresholds and notifications. The platform also captures live and historic trends in real-time and can also be accessed over a mobile device or computer.

Local Insights is their leading product. It embeds intelligence and helps manage end-to-end processes using data, analytics and machine learning, guiding farmers in adopting prescribed practices, understanding deviations, identifying potential threats, and predicting performance against targets. Working with the IBM Cloud PaaS and machine learning APIs, the OmnioFarm platform will help this sector to ensure higher levels of animal health and efficiency, ensuring sustainable agricultural productivity. Omniolytics uses IBM Watson Studio for building and testing machine learning models.

The startup is also a beneficiary of IBM's Equity Equivalence Investment Programme (EEIP) which provides emerging enterprises with access to resources like IBM technology, technical support and business mentorship. IBM supports Omniolytics with a blend of financial and non-financial support towards the development of the OmnioFarm platform – helping Omniolytics provide advanced technology services that are commercially ready.

“Agriculture plays a crucial role in the success of our local economy and through the EEIP programme we’ve been able to support Omniolytics at a critical stage of their business growth. By improving access to IBM’s Cloud and AI technologies and increasing the adoption of a range of digital solutions as we incubate and supporting start-ups – we’ve set out to not only support local demand, but also ensure our entrepreneurs become globally competitive. This is crucial in a post-Covid world and we’ll continue to provide innovative technology startups with advice, support and the best technologies available in the market,” says Craig Holmes, Technology Leader, IBM Southern Africa.

Working with IBM Services, Omniolytics has received support to refine its pitches, tweak its business model and perfect the backbone of its solution.

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## **About IBM**

IBM is the global leader in business transformation, serving clients in more than 170 countries around the world. Today, 47 of the Fortune 50 companies rely on the IBM Cloud to run their business and IBM Watson enterprise AI is hard at work in more than 20,000 engagements. IBM is also one of the world’s most vital corporate research organisations, with 27 consecutive years of patent leadership. Above all, guided by principles of trust and transparency and support for a more inclusive society, IBM is committed to being a responsible technology innovator and a force for good in the world. For more information, visit [www.ibm.com](http://www.ibm.com)

## **About Omniolytics**

Omniolytics is a tech start-up that uses digital technologies to address challenges in the agriculture industry. With a focus on innovation, Omniolytics partners with leading global technology, research and industry partners to develop solutions that have impact at scale. Omniolytics helps farmers improve processes across the value-chain using innovative sensor and analytics technologies. Farmers have real-time visibility into their operations,

enabling them to manage operational risks and forecast productivity in real-time anywhere at any time


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