Capgemini announces Project FARM, an intelligent data platform that aims to help small-scale farmers in Kenya resolve the global food shortage

*The platform decodes patterns in farmers’ activities and generates insights based on a combination of data gathered*

Paris, October 02, 2019 – Capgemini has developed an intelligent data platform called Project FARM (Financial and Agricultural Recommendation Models), which is designed to optimize the agricultural value chain and bolster global food supply. The platform uses Artificial Intelligence (AI) to determine farming patterns through big data, generating insights from the data to make recommendations. It uses Machine Learning to make the platform applicable at scale by connecting it with cell phones. This solution has been built in collaboration with Agrics, a social enterprise operating in East Africa, which provides local farmers with agricultural products and services on credit.

Global demand for food is anticipated to increase by 60% by 2050¹. Today, a great percentage of the world's population is fed by small-scale farmers, primarily from developing countries, using traditional methods and rudimentary farming practices². The complex value chain and the lack of resources and connectivity adds to the agricultural inefficiency, so, there is a strong need for a wider package of yield optimizing and risk decreasing services for these small-scale farmers. Project FARM, created at Capgemini’s Applied Innovation Exchange (AIE) Collaboration Zone (CoZone) in the Netherlands, aims to address these issues.

The data and analysis of Project FARM is shown on a dashboard that provides useful insights. For example, farmers can access tailor-made advice to optimize crop production. Patterns from the available data provide Agrics with information that can help to steer commercial decision-making and provide insights into potential business risks. Information can also be provided to partners in the value chain, mainly providers of inputs (such as seeds and fertilizers) as well as producers and buyers, thereby eliminating inefficiencies.

Julian van Velzen, Data Analyst at Capgemini who leads Project FARM, said, "By connecting farming communities with data science, and big data with traditional farming methods, the FARM platform is built to optimize the value chain and bring parties together as an ecosystem around one data-driven platform. The platform can pave the way for bringing automated farming to small-scale farmers. With the increasing availability of open data and decreasing prices of sensors and satellite imagery, the future of farming is bright.”

Project FARM collects data from various public and private sources, sets it up in a cloud environment for hosting, and runs analytical models in the same cloud. Agrics offers data about crops grown, potential and realized yield, field perimeters, credit and repayments. This information is combined with data from Copernicus, a European Space Agency program. To facilitate the satellite data, project FARM is connected to project Sobloo, a Copernicus Data and Information Access Service (DIAS).

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2 The State of Food and Agriculture 2014 by the Food and Agriculture Organization of the United Nations.
As a global leader in digital, Capgemini’s ambition is to help make the digital revolution an opportunity for all, and to be the bridge between technology and society. Capgemini’s aim is to expand its social impact, acting as Architects of Positive Futures, with more and more projects focusing on enabling Digital Inclusion.

Violanda de Man, Innovation Manager at Agrics East Africa said, “Project FARM provides Agrics with an excellent opportunity to maximize value for its clients - the smallholder farmers - and to other actors in the value chain like processors and financial service providers. Through our interactions with the farmers we are on top of a huge reservoir of data. We can now turn this data into meaningful insights, which allows us to provide time and location specific products and services to increase yield and lower risk at farm and value chain level. Increased value chain effectiveness will help to directly improve income and food security of rural populations.”

Lanny Cohen, Chief Innovation Officer at Capgemini said, "Project FARM is an excellent example of Capgemini’s commitment to drive positive change through its ‘Architects of Positive Futures’ initiative, and of leveraging AI technology with an aim to deliver real world solutions. We are excited to collaborate with our ecosystem of partners to help resolve one of the key human problems that exists today - the global food shortage - by supporting small-scale farmers.”

About Capgemini
A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients’ opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of over 200,000 team members in more than 40 countries. The Group reported 2018 global revenues of EUR 13.2 billion.