

## Agriculture Script for Podcast

Kapil Nanchahal , Ram Ramachandran, Lidwin Mendonca

### **Lidwin**

Hi Everyone, welcome to the Infosys Podcast on the Agriculture industry. I am your host Lidwin Mendonca from Infosys and we have with us today, Kapil Nanchahal & Ram Ramachandran.

I've had the pleasure to work closely with both these gentlemen in the past couple of years.

Kapil heads Resources Americas at Infosys, managing the growth and management of existing and new relationships in North America and Latin America. He is an industry leader focusing on advising enterprise clients on IT and business transformation.

Ram Ramachandran is a veteran at this industry too. while he majorly focusses on new account openings, he has been an integral part of the industry managing existing client relationships too.

Kapil, Ram, We are delighted to have you with us today. Well, the increasing demand for food, changing climate and increasingly scarce arable land is putting significant pressure on agriculture. The industry needs to get more sustainable and productive. I know you have some interesting thoughts on the agri industry, Kapil. So, let me start by asking you..what are the interesting trends you are seeing in the Food and Agriculture sector?

### **Kapil**

In our opinion the next decade will be one of the most interesting times for the Food and Agri sector.

The world is trying to address the explosion in global population, reduction in agricultural land, and the exodus among farmers. These problems require global agri producers to effect a fundamental shift. Despite three revolutions in the 20th century, the industry is looking at an even more game changing Digital Revolution now. Let me explain how...

For one, Technology is playing a huge role in democratizing information for farmers, elevating them as EQUAL stakeholders to medium and large players. Farmers are now harnessing weather information, commodity pricing information, analytics. Globally, this has led to crop yield improvement and better pricing negotiations for them. So, the larger players need to continuously optimize their operational costs and innovate to develop new product lines.

Second; the demand for sustainable farming practices will keep growing. The need is to shift the onus from farmers and fertilizer producers to other players like Agri equipment manufacturers. We are bound to see an increase in crop yield in the next few years. Food retailers are demanding way deeper extent of food tracking. Consumers want to know what they are consuming. Is it sourced responsibly? Using Blockchain, we offer tracing solutions at a granular level, quite literally! Finally, even the end consumer

### **Lidwin**

Ram would you like to add some thoughts too?

**Ram**

Yes, sure. While Kapil spoke about the farm side, it's important to know that even the end consumer demand and taste is changing. There is a higher demand for organic food. Millennials are certainly willing to pay the premium for it. So, this has put tremendous pressure on food retailers that has in turn become an opportunity for food processors. Our clients are witnessing a huge upsurge in new and highly profitable food categories – be it organic, Vegan, natural sources of lean starch so on and so forth..

**Lidwin**

Thanks Ram. Well, I see these trends drastically altering the outlook of the food & agriculture sector in the next few years. Which leads me to my next question. So Kapil, how is Infosys preparing for this change and investing in the Food and Agri sector?

**Kapil**

Infosys takes an ecosystem view when it comes to the Food and Agri sector. And, to understand the ecosystem better, we have established our own Model Agricultural Farm in India. Here, we carry out trials for technologies like sensor-based IoT solutions and drone-based imagery solutions for commodity crops like corn, soybean, and sunflower. These tests provide good insights for our customers who want to leverage our Digital Agricultural solutions.

We have also established partnerships with leading institutions like the Purdue University to solve a number of business problems related to crop storage, food tracking, precision farming.

Finally, we also work with customers from different sectors like financial institutions, retailers, manufacturers, logistics, and telecom who play a role in the agri value chain. For example, we've developed a 5G solution with a telecom company to be used for seamless communication between on-field sensors and an analytics engine.

**Ram**

If I am just complementing what Kapil said. Our Digital Agricultural solution seeks to solve industry problems like crop variety selection, fertilizer recommendation, sensor-based remote irrigation, disease and nutrient deficiency management, sustainability assessment, and smart warehousing.

We have invested in Infosys Living Labs and Digital Studios across the world through which we collaborate with our clients to enhance the Digital Worker concept which is the future of farming.

Our customers recognize that we take a 360-degree view of business solutions for the Food and Agri sector.

**Lidwin**

That's a really good point you raised Ram. Digital transformation is the buzz word now, and so, what are some of the key transformative projects that Infosys has delivered to its clients in the Food and Agricultural sector

**Kapil**

Infosys has helped customers optimize the whole value chain from crop inputs, seeds, farm equipment manufacturers, grain processing to the food ingredients players. We've implemented a Greenfield project for a Fortune 200 Agro-Chemical producer to enable growers to make critical crop input decisions for higher yield and lower risk. Pre-season planning was enabled with decision support for seed variety, and variable rate planting. In-season recommendations were made available for crop protection, fertilizer application, and irrigation. End-users are applying these to their current crop instead of waiting for another season.

**Ram**

In fact, our listeners will be interested to know that our clients use machine learning powered commodity trading solutions for price forecasting. They harness the power of these solutions to capture full value from pricing, and focus on predicting market indices.

Likewise, Infosys has helped customers in leveraging weather stations, soil sensors and drones to collect information like moisture, biomass index, soil electro-conductivity, disease affliction, and compare these against the expected growth stage. These solutions have helped growers with the right advice on applying crop inputs and irrigation plans.

We have also helped clients build farmer collaboration solutions. Extending the value chain we have helped farm equipment companies develop next-gen precision planters and other farm equipment.

**Lidwin**

I agree with you there Ram. There is no one-size-fits-all solution in this industry because of the continuous shift in customer portfolios. BUT I believe we have continued to remain the partner of choice for our clients due to our focus on the entire food and agri value chain. So Kapil can you elucidate the Infosys value proposition for clients in the Food and Agri sector?

**Kapil**

Over the last two decades of transforming clients in the food and agri sector, we have developed a deep appreciation of the complexities behind the major functions. Whether it is field operations, storage, supply chain, or manufacturing & operations, we understand the business imperatives of our agri stakeholders.

Our customers like us for this 360-degree perspective and end to end accountability that we bring to our solutions by integrating offerings like telecom solutions, manufacturing, or logistics solutions.

We have invested in development of a really strong partner ecosystem of software products vendors, hardware vendors, industry forums, research institutions. This gives us an ability to expand the scope of solutions. That way we don't limit ourselves to deliver a services only solution. To support these partnerships, we have invested in our own assets like Modern Farms, Digital Studios, and Living Labs that enable us to constantly try new things.

Finally, our global presence is extremely helpful to our global agri/food customers,. It is not unusual for our customers to source commodities from Kaduna in Nigeria, process them in Seoul, trade them in Chicago Mercantile Exchange and ship them to Sau Paulo. Global organizations in this sector understand

the value of plan global and act local. And that's exactly what we have enabled over the last two decades!

**Lidwin**

Thank you so much Ram, thank you very much Kapil for joining us on this podcast.

**Ram**

Thank you for having us on the podcast Lidwin. It was wonderful chatting with you.