DÉBAT

Lucia Sinapi-Thomas, Executive Vice President – Capgemini Ventures Managing Director

We have 10 minutes left so I suggest we open the floor to questions.

Bayu Krisnamurthi, Professor at the Bogor Agricultural University, former Vice Minister of Agriculture of the Republic of Indonesia

I want to take advantage of this panel to probably raise questions that are related to tomorrow's panel on food security and hunger. Eiso, you mentioned workforces and Rotem, you mentioned the importance of how AI and humans interface. I think the workforce that is very important to tomorrow's question about hunger and food security is the farmers and lives in Africa and Asia. Farmers have so many limitations: they are not well-educated and do not have any money or computers.

My question is for both of you, will communication between AI and the farmers produce something that will help the farmers to produce more? At the end of the day, we will have to eat the food the farmers plant, we will not eat AIs. How will AI help farmers to produce more?

Rotem Alaluf, CEO of Wand.ai

I can start. It is a great question, and I must say there are some problems today with the current technology and actually both liquid foundation models and all the things we are doing are discussing the sustainability problem of running very large models. We have been in touch with one of the largest countries on the same topic and one of the things we saw is that if we take the large models today, it does not make sense from a compute and salary perspective to even look at how to bridge the gap. The goal and value of small models, which are still as smart of even smarter than the large ones, is that they can give significant help in those fields. Small models also enable us to go into fields that were not enabled with sufficiently sustainable large models in different problems, of which this is one.

I would say that from the farmers' perspective the advantage lies in how we can optimize crop management, have different insights about soil, different places, weather problems, alerts, etc. Agents can do a lot of things that make it possible to be more productive and eventually, grow more crops with less effort, as well as less waste. One of the biggest problems today is waste because of missing data that is difficult to get in that specific scenario, like potential changes in the weather, ideal soils or medicines, etc. I believe that agents can provide a lot of help there, but we need to do a lot of work to make those models small, more efficient and sustainable, so that they are also economical. It is about to reach those places, it is something that a lot of companies are working on including us. There are countries with more than 100

million farmers, so it is a huge opportunity and of course, they eventually feed us, so this is something that I think we need to push forward in, and we are also seeing a lot of advances in this field.

Lucia Sinapi-Thomas

Would you like to add anything, Eiso?

Eiso Kant, CTO & Cofounder of Poolside

I would be happy to. First, I would like to say that I spent some of the early part of my career in Jakarta and Indonesia. I think we need to separate what we see as progress on AI, which is really closing that human capability gap, versus the underlying technology that is already doing things that humans today cannot do, such as predict the weather, use satellite images to understand patterns in crops, etc. I think what we have seen so far in the United States and Western Europe is that technology is almost forcing any type of small-scale farming to consolidate into extremely large-scale industrial farming. I would say that one of the most successful Artificial Intelligence technology companies of all time is John Deere. In the United States and other parts of the world, John Deere has allowed for incredible yield over return on farming. But at the same time, because technology became one of the largest underpinning costs of farming in the West, it has meant that small-scale subsistence farming or even small producers, barely exist anymore. For me, I think there is a broader question that gets accelerated by AI but that was already there in the previous 15 years, which is how it will play out in countries like Indonesia, where there is not the dominance of large-scale industrial farming. Frankly, there are much smarter people than I who can answer that.

Lucia Sinapi-Thomas

Thank you, Eiso. I think we are reaching the end of the panel. I would first like to thank the panelists because it has been demanding, and we had several formats. I hope it was instructive for you, and I wish you all a nice lunch.