Q: Companies might find themselves in a situation when they need to catch up with this ongoing technology shift. This often means a modernisation or at least some upgrade for the current digital solution. This might be too expensive to undertake or the needed knowledge is missing. For them, what is the right thing to start from?

A: It is crucial to find out and clarify where we are now. The world is both very complex and volatile and developing rapidly and, to know where to go, one should objectively determine the company's current business position. Next, it is necessary to consider what is genuinely needed by the company and the customers – what is the vision as currently there are so many solutions looking for problems and new technologies rise and sometimes fall very quickly. It might be beneficial to ask outside consultation to support this process because it is sometimes hard to see outside one's own "box". For example, we have helped different customers with a consultation-type project to give this kind of insight and create a modernisation roadmap, and such projects have been well received

Q: In situations where an Internet connection is not available, are there any digital tools that help in such cases?

A: Yes, there are, although you might end up with a more limited set of functions. Most functions can work as expected if the solution is a native application for Android or iPhone or a PC program. In addition, there are ways to support offline functionality with a web-based app, for example, HTML5's offline functionality is pretty good. In these scenarios, you could, for example, collect the data in the morning, do the necessary tasks during the day and synchronise the data when you once again have the connection. Even if the wireless networks have more coverage today, there are places where the structures prohibit transmission, so these solutions will be helpful in such cases.

Q: How can we support technology in a country that has initiated the use of a digital platform in doing extension services (advisory services)?

A: As a starting point, it would be good to clarify where we are and what needs we need to fulfill to reach the objectives of the offered services. If possible, it is beneficial to ask others who might have been in a similar situation. In technical questions, you could ask us or your technical partner. Regarding, for example, milk recording-related advisory services, ICAR provides many forums where you could get more information on how things are done in other countries. Many of the solutions presented today can enhance the relationship between the farmer and the advisor and sensibly divide the work processes – all these things are possible.

Q: Who is the owner of the data and the IPR?

A: This question does not have a clear answer as it is dependent on many factors. Who or what generates the raw data, who stores, validates, and processes it, and what kind of contracts are in place? As data is a digital concept, you could have some rights to initial data, but some other party might have

others to a modified copy of the data. As a rule of thumb, farmers in our field have the most valid claims but, as stated before, many conditions could alter even this premise. Regarding the IPR of the software, that usually belongs to the companies who have created the software.

Q: The number of international cooperation groups dealing with the dairy data has increased, raising national data flows to a global or multi-national level. What kind of future perspectives do we have here?

A: The world is growing smaller every day, and it might be highly beneficial even for competitors to find some common areas in which to collaborate. We all face similar challenges, and it is not a good use of diminishing resources if we all devise similar individual solutions. For example, entities like iDDEN and Agrirouter are good examples where potential competitors work together to make data integrations easier, benefiting all parties.