INSIGHT: The Animal Nutrition Sector's 2020 Digitalisation Agenda

19 Dec 2019   Source: Feedinfo News Service

19 December 2019 - As demonstrated by the senior executives, innovation is the animal nutrition's mantra, and so is accelerating the introductions of innovations into the marketplace by partnering with the leaner and more agile start-ups.

(see   INSIGHT: The Industry's View on Agtech Start-ups and Technology Partnerships (/console/Navigate.aspx?url=https://www.feedinfo.com/pages/INSIGHT_The_Industry_s_View_on_Agtech_Start_ups_and_Technology_Partnerships/6417591

A common denominator and indispensable means to ensure the development of innovation in the modern world is data usage and digitalisation which is increasingly becoming integrated in the global animal nutrition sector.

Though most of the innovation is seen at farm management level, more and more systems are measuring the effects of nutrients on animal health and digestion. And we are getting better at predicting animal productivity and behaviour. In 2020 and beyond, we can expect animal nutrition companies working harder at this as there is a clear trend towards more and better usage of data and implementing digital solutions.

"Digitalisation has become a part of life," argued Geert Wielsma, Vice President Business Development, Perstorp. "We see it as a very welcome development as it enables the industry to work more fact-based. That allows us to better monitor e.g. the status on farms but also has advantages in relation to for example sustainability. More data means we can make better decisions on for example feeding strategies which results in less lost resources. It means quicker reactions to animal welfare issues and faster innovations too."

"The use of data and of digital tools is absolutely unavoidable and in fact essential in our view. This will drive innovation in feed concepts and their output and smooth delivery and logistics. This is also important with respect to reducing the carbon footprint of our industry," added Steven Read, Chief Operating Officer, ForFarmers UK.

For Dr. Alfred Petri, Senior Vice President, Precision Livestock Farming, Evonik, the digital future in animal farming has just begun.

"We are still at the surface of what will be possible in the future to predict and improve the performance, sustainability and animal welfare along the whole animal protein value chain. Companies with different backgrounds such as farming equipment, manufacturers, feed additive producers or veterinary companies will attempt to enter into the field of digital applications to collect as much data as possible in the production chain with the aim of gaining insights which allow the further optimisation of the production chain," he said.

For Co de Heus, CEO, De Heus, the highest benefits are still found in the further professionalisation of farm management. "It is up to us as a supplier of animal nutrition to offer the solutions farmers need to achieve their goals and further professionalise their farms," he said.

These comments can be extended to the growing relevance of precision livestock farming and feeding.

"Digitalisation offers a chance for the animal sector to move into precision-livestock farming with the help of digital tools in order to save costs, improve the quality of products and processes and to reduce emissions," commented Franz Waxenecker, Managing Director, Biomin.

"Digitalisation offers gains in sustainability, welfare, customisation, and other areas, and we embrace digitalisation as one of many means to improve animal nutrition. Over two decades ago, we were the first to offer satellite telemetry on an inventory management system to reduce the carbon footprint on deliveries," added David Dowell, Executive Vice President and COO, Novus International.

"For some species measuring the output is relatively straightforward and is being done already on daily basis. For others, monitoring permanently and accurately the biomass or body weight evolution in meat and farmed seafood production would be of great interest for nutritionists, and could potentially lead to breakthroughs for predictive growth models and precision nutrition. Applying digital technologies on relatively under-researched species like shrimp dramatically improves farm output," went on to say Laurent Genet, Chief Strategy Officer, Nutreco. "Nutreco relies heavily on digital technologies such as Near Infrared Spectroscopy to monitor the nutritional features of feed

ingredients and to adjust recipes, even directly on the production lines. AI and self-learning algorithms are promising in fields related to imaging or acoustic signals interpretation. We expect really convincing applications will soon be available."

The potential offered by digital in animal nutrition applications is huge, namely disease prevention.

"With antibiotic reduction, it is more important than ever to predict disease before an outbreak and to measure the impact of the health products we are developing," Aart Mateboer, Business Unit Director, DuPont Animal Nutrition illustrated.

Summarising the opportunity, Johan De Schepper, Member of Executive Committee & Business Development Group Director, Royal Agrifirm Group said: "Digitalisation is a very useful instrument to professionalise all aspects of farming, product development and beyond. The animal and the digital will be very closely linked. And the speed if development of solutions in animal nutrition can only be significantly enhanced."

Adding to this, Adriano Marcon, President, Cargill Animal Nutrition said: "Digitalisation will change the way producers make their most important decisions. We want to partner with them to create new data (such as images and audio information), make data available real-time, simplify the collection and integration of data, and find critical and actionable insights from that data. When we combine all this with deep expertise in animal nutrition and production, it will improve predictions, such as productivity and optimal harvest time, and help customers make better decisions."

There are a few pieces of advice worth bearing in mind, though.

As Bernhard Putz, Vice President Global Marketing, DSM Animal Nutrition & Health said: "The data being created provides an opportunity for businesses to offer more personalised (or "animalised") and in-depth service. The issue people need to beware of is it requires different levels of agility throughout the business and different from existing approaches."

Stefaan Van Dyck, President of Kemin Animal Nutrition and Health, EMENA added: "Big data projects can be quite complex so it is crucial to focus more and more on specific elements. Winners in this segment will be the ones with a very specific focus and not those lost in a generalised big data plan. And of course, precision feeding is only possible with a strong digital basis."

Patrick Charlton, Vice President, Alltech went on to say: "Our industry is getting better at capturing information but the challenge is to harvest and convert the data from all kinds of areas in a meaningful manner. The big win for our sector will be when technology enables us to do both and allows farmers to make big decisions."

And finally, Nutreco's Genet warned that the animal nutrition sector suffers from a lack of pre-competitive space when it comes to digitalisation.

"The animal protein sector is not digitised enough - or at least digitalisation is not as common as in other industries - and organisations need to openly share data," he said. "This will eventually happen but it will take time."