

TechKISS is a project of the NSW Dairy Industry Fund that aims to help dairy farmers 'get what they want' from individual cow management technologies: auto-drafting, computerised bail feeding, in-line milk meters and activity meters. Using these technologies on farms has the potential to significantly increase productivity in key management areas such as feeding, milk quality, cow health and quality assurance.

Information was compiled from 141 dairy farmers, 20 tech suppliers & 35 advisers in 2018 and 2019 to identify the extent of technology use, and 'tips and traps' around having it work on farm. (The approach is described in the TechKISS Project Report.) This report identifies 7 areas that the project team believe have significant implications for industry.

1. Technology use by farmers

Farmers primarily use these cow management technologies to automate day-to-day management – and most are very positive about their investment. (The majority of farmers surveyed agreed that it made a 'significant difference to the farm business').

While the design and function of the commercial technologies are delivering what farmers want, many only use part of the available functionality and could therefore value-add to their existing investment.



Further development of these cow management technologies is not an industry priority as the commercial sector is providing what farmers want.

2. Available products

TechKISS has created the TechMatrix – an independent list of the technologies commercially available in Australia. This is a pre-competitive resource for farmers.

The first version was published in November 2019. This is a very dynamic space with new brands and applications regularly coming onto the market.



If farmers find the TechMatrix useful, it will need to be kept up-to-date.

3. Integration of tech on farm

Getting technologies to work together is a common source of frustration for farmers. While it's expected that kit from one OEM suite will integrate, it is not a given for farms using a 'mix and match' of brands.

While DataGene's Data Vat provides a mechanism for data exchange, large manufacturers that supply the full milking system suite currently have little appetite for integrating their products with others.



Tech compatibility needs to be a purchase consideration for farms where this is a priority (it can be difficult to negotiate retrospectively.)

4. Support services for tech

Farmers rely on other farmers, manufacturers and distributors for advice. No-one is offering independent advice on purchase, set-up or use of these technologies as a commercial service; and there appears to be little demand for this service.



Industry resources and training can provide useful information (like the TechKISS suite of resources).



TechKISS Reflections For Industry

5. Herd-level productivity gains

Very few farmers are using data from the cow management technologies to improve performance in their herd, although this is where a lot of farm productivity gains could be made.



Herd-level analysis and interpretation of data is key to achieving dairy farm productivity and should underpin industry R&E activities.

6. Use of tech by animal health advisers

Most of the analysis and advice around herd performance in the past has been done by service providers.

Use of cow management technologies on farms is not providing a bounce in advisory services around animal health performance. Service providers find it:

- Too time consuming to get data from these technologies, &/or
- Too hard to interpret the indices contained in the reports (because calculations are not transparent and indices are not always relevant).

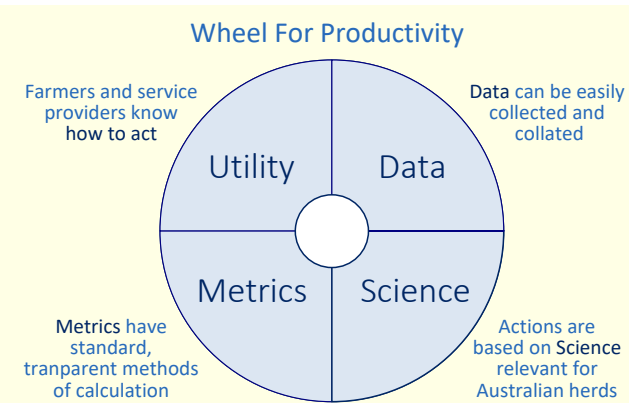


Advisory services around herd performance appear to be declining. This reduces industry's capacity for problem solving and productivity advice on-farm.

7. Animal health metrics

Productivity gains, and the efficiency of the RD&E investment, are increased when action is based on good science that underpins the Australian systems of dairying.

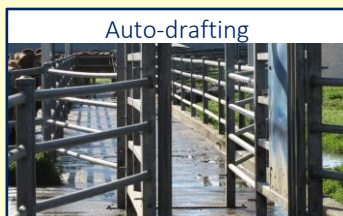
In the past, programs have built this understanding across industry using the elements shown in the diagram below.



The concept of industry-agreed indices around animal performance now appears to be at a turning point with many different dashboards and performance indices being offered by commercial suppliers (including some which have been developed for dairying in the northern hemisphere).



Industry leadership is needed to ensure Australian dairying (farmers, service providers and industry) has the metrics it needs to improve herd performance and productivity gains.



Auto-drafting



Computerised bail feeding



In-line milk meters



Activity meters

Visit [NSW Department of Primary Industries](#) for videos and Topic Sheets on the TechKISS technologies and the TechMatrix.



TechKISS is a New South Wales Dairy Industry Fund project delivered by the Harris Park Group. Project information is generic and is offered on an 'as is' basis with no guarantees of completeness or accuracy. Please seek advice before acting.