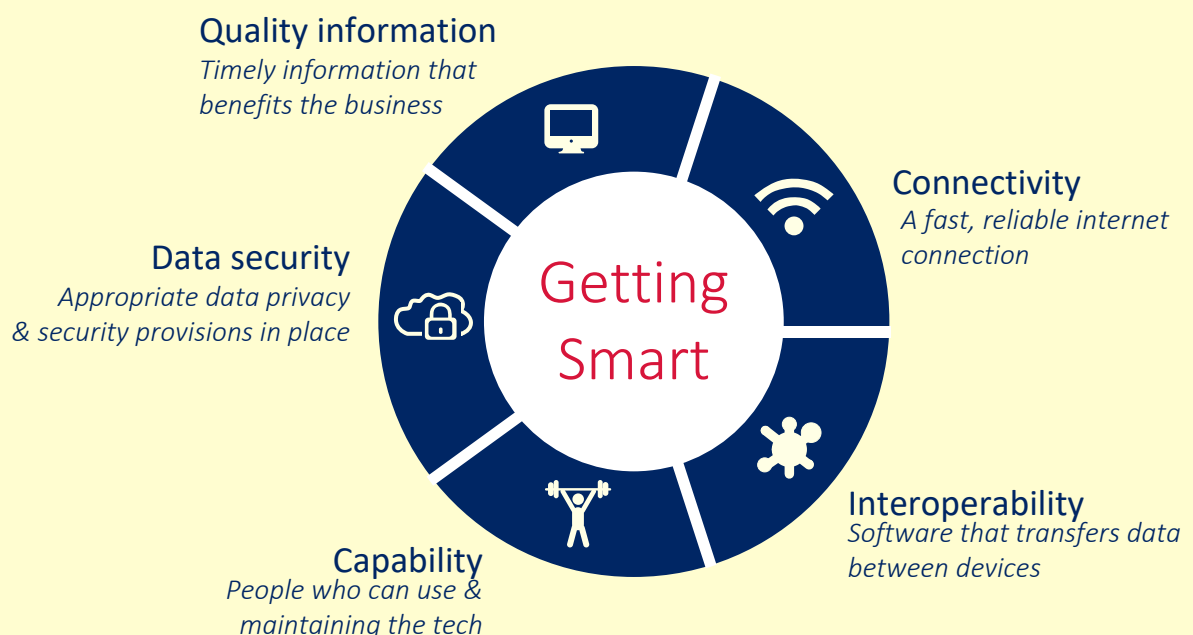# TechKISS Topic: Tech Fundamentals

Dairy Australia

Technology is necessary for future agricultural productivity and sustainability. Smart devices (such as sensors) that connect to, and inform, each other have the potential to transform farming by:

- Monitoring situations and providing the relevant information as it's needed
- Enabling remote action, and
- Automating tasks.

TechKISS has short videos on the technologies commonly used for individual cow management based on the experiences of dairy farmers and service providers.

This topic summarises some general principles that underpin all these technologies.

Fundamentals for smart farming

Quality information
Timely information that benefits the business

Connectivity
A fast, reliable internet connection

Data security
Appropriate data privacy & security provisions in place

Getting Smart

Interoperability
Software that transfers data between devices

Capability
People who can use & maintaining the tech

Cow Management Technologies Tech Fundamentals

Data from tech is used for herd management

While dairy farmers primarily get cow management technologies to automate tasks, the technologies generate rich data streams that can be used to improve feed efficiency, reproductive performance and udder health of the herd.

➔ Check whether the tech works with your Herd Management Software before buying it.

People are trained and confident to use

Technology is not a 'set and forget', people keep the system both operational and relevant. Having a staged approach to training can be helpful (familiarise, consolidate and then customise).

➔ Ensure everyone who works on the farm knows what is expected of them and have the skills to do it.

Compatibility is a priority consideration at purchase

Compatibility can't be assumed between brands. Farms using a 'mix and match of technologies are responsible for getting them to work together and this can be hard to achieve retrospectively.

➔ Make compatibility a priority consideration at purchase if you want different technologies to work together.

Supporting tech is part of the farm routine

The software is as important as the hardware for any computerised equipment – and it requires regular attention to ensure smooth functioning (such as keeping the operating systems up-to-date and ensuring data is backed-up).

➔ Make maintenance and support of technology an important part of the farm routine.

Get tech that suits your farm and does what YOU want

When purchasing new gear it's important to make an informed choice - what's bought today will be there for years. Know what infrastructure and people capacity is needed for the tech to work, and what services and support are included the cost.

➔ Talk to as many people as you can – other farmers, service providers and tech suppliers.

Expect change

Cow management technologies are getting smarter – with increasing wireless data transfer, computer processing capacity, energy efficiency and technical innovations.

➔ Expect your technologies to change and plan for their replacement.

| Auto-drafting | Computerised bail feeding | In-line milk meters | Activity meters |