



Farm IT Systems/Integrating Data

From individual sensors to complete milking systems, there are hundreds of products currently available to monitor the farm and create data. Often the missing link in these products is integration. Integration is combining data from multiple systems in a way that creates new information, or making the data easier to see by working it into daily routines. Following are some ways that you can integrate information on your farm.

Payroll made easy

Tracking employee hours can be a challenge no matter how many employees you have. Forgotten punches, double punches, and hand entry of time for payroll are only a few of the issues that can occur. As farms expand to multiple sites, you can add the travel time to pick up time cards and resolve issues to the mix. One solution to this is using networkable time clocks. These are time clocks that can be placed at each site and can be accessed from the office where payroll is done. Employees punch in or out using a magnetic card, or by scanning their hand or face. Scanning, or biometrics is an easy way to eliminate errors and because it uses the shape of the hand or face it is accurate without being invasive.

In addition to making tracking employee time easy, these devices can also be used to enforce overtime and time off policies. They also offer the ability to easily import time data into popular payroll software such as QuickBooks, or CenterPoint. The clocks do require an Internet connection, some initial setup, and often some changes in the farm's network router. However, once they are in place they are an excellent way to increase accuracy and efficiency in time keeping and payroll.

Tracking Heifer Weights

Tracking heifer weights is relatively low cost and easy way to add relevant information to your heifer management program and potentially add income to your bottom line. There is consistent and strong evidence that heifers who are fed well and grow rapidly are more profitable animals over their lifetime. It is generally accepted that heifers that grow well have about a 1700 pound per lactation advantage over herd mates that do not. Larger calves also carry more reserves to ward off or minimize the severity of illness. The soft income from not treating animals can represent a significant savings in time, medication, and lost animals.

Growing heifers faster is not free. They will need to eat more to grow more, and you will probably have to change how animals are managed or what is fed. Tracking body weights gives you information to evaluate this so you know if the changes resulted in a sufficient positive response to justify continuing. To begin weighing animals and tracking growth you will need scales, somewhere to record the weights, and a way to calculate growth response. There are many options available for weighing animals, however most of them do not offer an easy way to integrate the data into existing systems to make using the data easy.

Some farms are investing in Tru-Test weighing equipment to weigh the animals, and using Dairy Comp 305 to store weights and calculate response. The process of capturing the weights is very simple. Place the scales where it is convenient to load the animal onto the scale, walk the animal onto the scale, allow a second or two for the scale to stabilize, enter or scan the animal ID and press a button to store

the ID and weight. When you are done weighing animals simply lift the indicator off the scale and carry it to the Dairy Comp 305 computer. Plug it in and transfer the data to Dairy Comp with a few key strokes. Dairy Comp automatically records the weights and calculates growth response. A standard report from the GUIDE section of Dairy Comp 305 that shows animals weighed in a pen recently. Each dot represents an animal that was weighed. Notice the outliers, these are either animals that are not doing well and should be checked, or they are data errors that can be addressed by training staff, or maintaining equipment.

Looking at individual records for outliers can help us understand more about the calf and help with treatment decisions. The calf below had a weight that was below her herd mates and has a history of illness. This may be an animal that needs to leave the herd.

Events	Items1	Items2	TestDays	Dam Info	Lifetime
ID	2606	DIM	0	MKDAT	-
LACT	0	MAVG	0	PGVAL	0
MILK	0	SCC	0		
PEN	26	305ME	0		DUE

03/14/16	PNEU	05/16/16	WEIGHT	285
03/16/16	PNEU	10/18/16	WEIGHT	550

Cameras where you need them

Security cameras are becoming common on farms. A few of the places they can be found include milking parlors, calving pens, milk houses, feed alleys, and drive-ways. Every farmer that I have talked to in the past two years has told me about ways they have used cameras to better manage and secure their farms. Following are a few things to consider if you are buying cameras, or just want to get a little more out of the system that you have.

Put the cameras in your pocket. Most camera systems can be viewed from a mobile device. Phones are the most common option, but most also can be viewed on tablets, or a simple web page. To access cameras this way the system needs to be connected to the Internet through the farm's network, and some changes need to be made to the farm's router. Viewing cameras does require sufficient Internet upload speed, so be sure to check this out if you're going mobile.

Make them visible to more people on the farm. Some farms are getting extra use out of their cameras by making them visible to more people. The cameras are displayed on large monitors in high traffic areas of the farm such as the milking parlor so multiple people can see the camera feed easily. A very common use for this is monitoring calving pens. The calving pen camera is displayed on a large screen so people passing by can check to see if a trip to the pen is needed.

Another innovative way to use the large monitor idea is monitoring the crowd gate and holding pen. In this instance a large monitor in the milking pit displays the holding area and allows the operator to see what is going on at the rear of the pen. This allows them to move the gate forward or backward as needed.

Integrating data is something to consider when purchasing new technology or adding components to existing technology. Call Dairy One for help. We are happy to provide a system audit in either case and help you figure out the best way to keep moving forward.

