

WORKING SMARTER NOT HARDER

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Working smarter not harder is about increasing people performance on the dairy farm. It's about getting more for every hour worked, rather than working more hours. It's an old cliché, but no less relevant today than it was when coined. To increase productivity and improve standards of living there is no option but to work smarter, not harder.

Why is working smarter not harder important?

Significant societal and industry trends that will come into play over the next 10 years will affect the demand for and availability of labour. Some of these include:

- farm owners are getting older and farms are amalgamating. This means there will be fewer owner operators and more employees will be required. It is estimated that an additional 5,000 employees will be needed to meet demand over the next 10 years.
- New Zealand is sitting at under 4% unemployment. As a result it's hard to find people to fill roles on dairy farms. This is not a temporary glitch. There are 70 million people who will retire in the OECD in the next 25 years and only 5 million replacements available. This means competition for employees locally and globally will only increase.
- people are changing. Generation Y, those aged 18 to 29, want good jobs today rather than the promise of a great job tomorrow. Europeans are a decreasing part of New Zealand's population. Cultural and generational changes are affecting the way in which we need to engage labour.
- work/life balance is becoming more important to society. As an increasingly wealthy consumer society we require more time to spend our earnings, so time off work is an important issue for employees.

For dairy farmers this means:

- labour supply will continue to be tight
- farmers will need to compete harder with other industries and countries. A critical part of this will be overcoming the industry's image of long hours

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- if employees can't be attracted to the dairy industry, farms will have to develop systems to cope with less labour input.

The bottom line is, employers will have to refine processes and identify the work that really counts on their farms to achieve productivity requirements and at the same time meet the demands of the working population. In other words, dairy farmers will need to look for ways to improve people performance and work smarter not harder!

Improving people performance

The following framework, set out by the Governmental Workplace Productivity Working Group, provides a useful overview of the factors contributing to people performance and highlights that a multi-pronged approach is necessary.

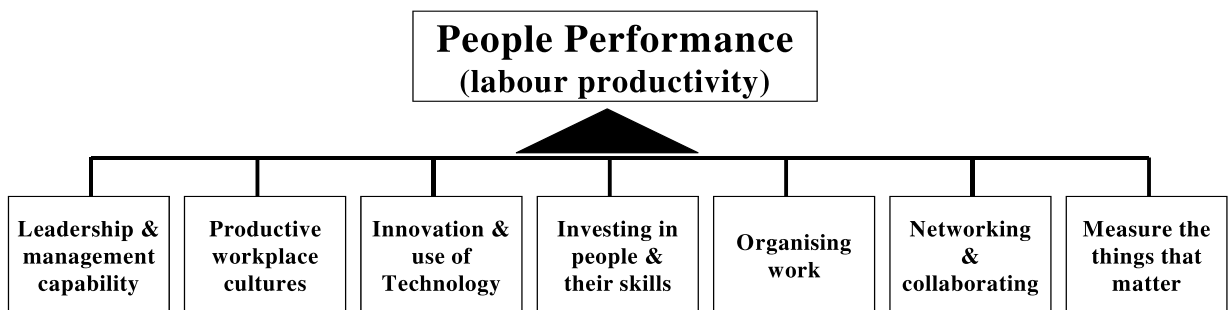


Figure 1: Factors contributing to people performance

Examples of each of these components as they may relate to performance on farms are given in Table 1.

Table 1: Ideas to influence people performance

Factor	Example on dairy farms
Leadership and management capability	Has the business owner provided direction to staff and set appropriate systems and structures in place to allow the team to succeed?
Productive workplace cultures	Is the attitude of the team right? Are they motivated to perform or are they only there to collect a cheque?
Innovation & use of technology	Could the business be making use of new technology, eg, automatic weighing and drafting systems?
Investing in people & skills	Have the staff been trained in the skills and systems required to do the job?
Organising work	Have the tasks on farm been streamlined so that they can be done in as little time as possible while delivering consistent quality in a safe manner?
Networking and collaborating	Do people in the business talk with other businesses about the job and how they can do it differently for a better result? What could be learnt outside the industry? This also helps meet the social requirements of people at work.
Measuring what matters	The amount of time spent milking is 40 to 50% of all labour required on most farms. Reducing this will have a significant effect on labour requirements.

Perhaps the biggest influence on labour productivity is the skill of the primary decision maker. A skilled farmer will generate more output per hour of time input simply through making better and faster decisions. Therefore, the first and most important thing farmers can do to maximise productivity and profitability is to make sure they are not the limiting factor. They need to stay up-to-date with the latest in farm management practices and continue to seek out new and innovative ways of operating the farm. That could mean getting involved in discussion groups, talking with neighbours, talking with people outside the industry, enrolling in training or hiring the expertise of a farm manager or adviser.

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The Smarter Not Harder project

One other source of information is the Dexcel ‘Smarter Not Harder’ project, which is looking at innovative ways to improve processes and work design on farm. This project is funded by Dairy InSight and the Sustainable Farming Fund.

The primary focus of the project is to work with farmers to identify innovations that will enable other dairy farmers to reorganise the way they work and increase productivity.

It is widely recognised that New Zealand farmers are innovative. Examples of historical on-farm innovations include the rotary cow shed, the electric fence and use of shaving foam to identify cows for drafting. Yes the last one is a genuine innovation! Too often innovation is seen as the big steps forward, when in reality, it’s the small frequent steps that allow progress between the larger but relatively infrequent breakthroughs.

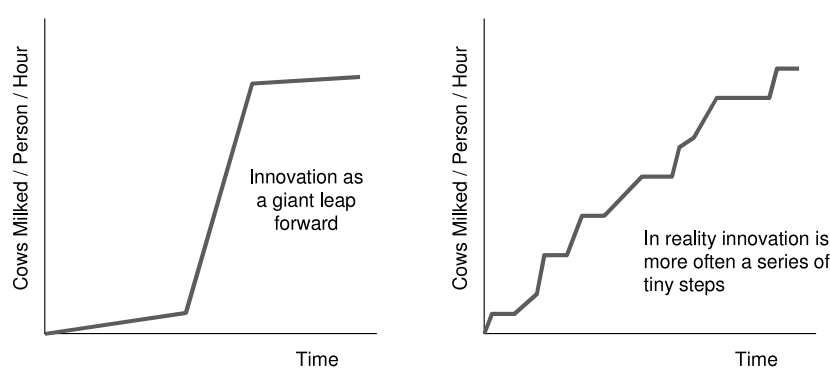


Figure 2: Diagrammatic representation of gains achieved through innovations

There are bound to be hundreds, if not thousands of innovations out on farm that perhaps are not recognised as innovations but which could add significant value to other farming businesses. The challenge for dairy farmers and Dexcel is to somehow capture these innovations and share them to help drive the productivity of the industry forward.

Smarter Not Harder Innovations Competition

The Smarter Not Harder Innovations Competition, a partnership between Dexcel and the Dairy Exporter, is one way that Dexcel is taking on this challenge of identifying and sharing innovation between farmers. The competition was designed to raise the profile of people performance as an issue and to start sharing ideas.

The inaugural competition was held in 2006 and all the ideas generated from this and subsequent competitions can be found at www.dexcel.co.nz, under the “people on farm” menu.

The 2006 Inaugural Winner

The winners were Charles and Abigail Nimmo with their whiteboard system. It was a good example of an incremental innovation that has had a big impact on one particular business.

In the next section of this paper Charles describes the innovation, how he uses it and what benefits he gets from it on his farm.

The challenge to other dairy farmers is, “How can this concept be adapted to add value to your businesses?”

Using visual aids for farm management

Charles Nimmo

Firstly I would like to thank SIDE for the opportunity to speak at this event, and Dexcel for their ongoing work to solve industry problems and for their large contributions to what is one of the most progressive industries in New Zealand.

Is there a practical solution for industry problems?

There are trials ahead of us within the industry. Studies suggest that staffing concerns among farm operators outweigh worries on both water *and* payout. Currently we have a highly transient, under-trained workforce of eclectic personalities, often living and working in close proximity on what are highly specialised operations, controlling millions of dollars of stock, equipment and land.

These factors all too frequently culminate in occurrences that I’m sure you can relate to. It’s the loader that hasn’t been greased for two weeks or months, the forget-me-not effluent irrigator spinning in one place for 24 hours, it’s the worker scratching his head in the paddock trying to remember if it was two loads to paddock three or three loads to paddock two, and it’s the 20 or so three-quarter finished jobs just waiting for you to discover them. And finally it’s you spending your day getting parts and supplies, fixing breakdowns, checking work and explaining jobs. This is not management, or work control, it’s a whole new job role that shouldn’t exist.

This board is my attempt to solve these problems and it works, as long as it is used with discipline. The boards have evolved considerably over the last five years, the most advanced and condensed attempt at conveying all relevant information is this board I call a ‘Work Control System’ (Figure 1).

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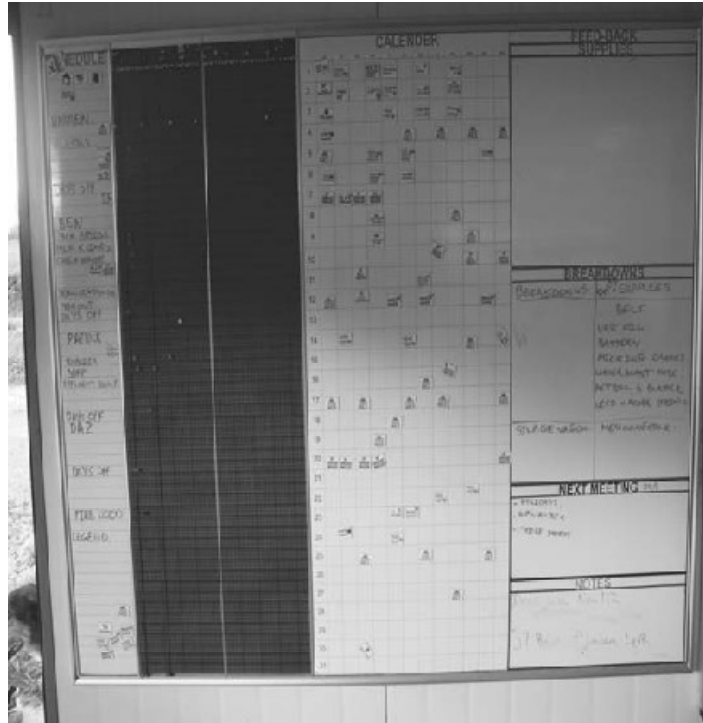


Figure 1: Work Control System

The board has three sections with three distinct management principles that together create a total work control system:

- Strategic overview (calendar)
- Work feedback
- Exception management (work scheduling).

To better demonstrate the principles, a game of rugby is a good example of a work control system. The coach and captain start with a strategic overview of all the players, their skills and how they affect the team as a whole. These factors are used in the game plan (work schedule). When the game starts the plan is altered as variables arise (managing exceptions) using feedback in terms of information on player form, field conditions, and referee calls and team strengths and weaknesses. This cycle is repeated constantly and provides a competitive edge if done properly.

What is strategic overview?

Firstly, the ‘calendar’ is driven by the principle ‘strategic overview’ (Figure 2). It’s called a strategic overview because it allows you plan the important events that are required for the successful operation of a dairy farm over a 12 month period, and display them so that everyone on the farm can share that same overview.



Figure 2: Strategic overview

This tool is a great way for inexperienced managers to stay ahead of the team and to avoid dropping the ball on major decisions. Furthermore, it works for more experienced managers to train staff on how a dairy year plays out. All major events are displayed with colour-coded magnetic icons. For example, the icon to prompt the commencement of pre-mating heats has a cow with a love heart and pink writing. The icon to prompt awareness for early seeding grass is green with blades of grass in the background. It's about having all your players in position, to create the best strategy and game plan.

Scheduling work and managing the exceptions

The schedule is where the hoof hits the track. You can take two months worth of calendar and work icons and allocate the jobs to individuals, under a timescale, and monitor their completion (Figure 3).

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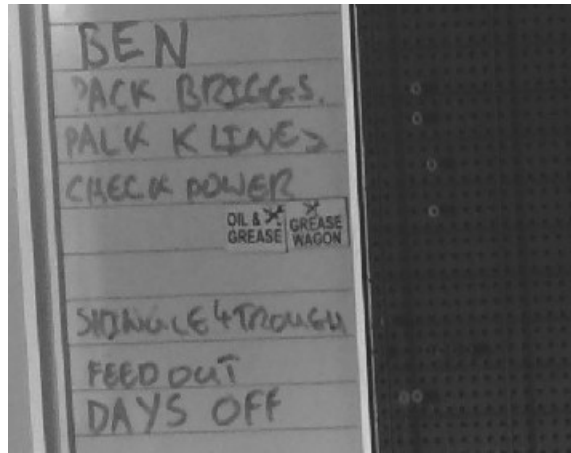


Figure 3: Scheduling work and managing exceptions

Each job is put on the magnetic strip under a workers name so at a glance each worker can see their job load, timescale and days off. Adjacent to each job, a colour coded peg is placed on the completion date. Every day a vertical bungee is placed over today’s date. This is where the ‘exception’ principle becomes operative. Any peg that falls to the left is unfinished and a decision must be made on what to do with that piece of work.

This piece of work becomes an exception and therefore feedback must come from the work team to determine what the next action is. This is where a 5-10 minute meeting a day is vital. Ask a question like “Mike (not his real name), how did you get on with sinking that post?” “I didn’t finish.” “Why was that?” “Shovel handle broke.” Therefore you allocate ordering a shovel and reschedule the work. The unfinished job and the shovel are not left to be discovered another day. Each panel represents a month and can be rotated to keep information current (Figure 4).

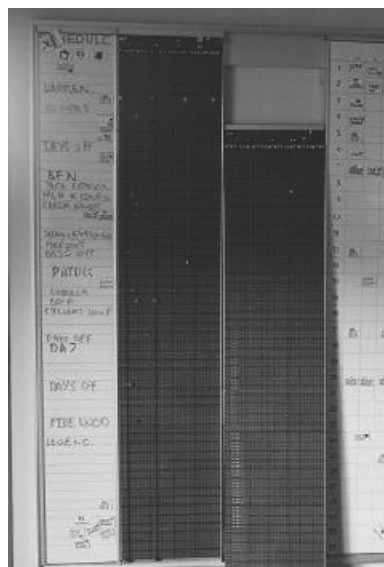


Figure 4: Exceptions

There's no efficiency without feedback

This brings us to the third section, which is 'feedback' (Figure 5). Although the staff may not believe you for a start, the work control board is actually a tool of the worker and not their master. It is driven by their feedback, and makes their own work more manageable, provides training for their careers and gets the boss off their back. If you don't believe me I will tell you that the first system was designed while I was the bottom rung on the farm. I designed the board to help the manager at the time articulate jobs to staff like myself, to foster staff initiative and to give him some time off. The intention was to make the job more pleasant and enjoyable for everyone. Little did I know that one month on I would be left running the whole operation when the manager left a week into calving. Feedback is the workers way of communicating why the work has not gone to plan and to log other jobs for scheduling. A peg can't be shifted until feedback is generated!



Figure 5: Feedback

Notes:

FEEDING

	HERD 1		HERD 2	
	am	pm	am	pm
NO OF HEAD				
AREA m ²				
MON				
TUE				
WED				
THU				
FRI				
SAT				
SUN				
MON				
SUPPLEMENT DISCOUNT			FED IN DARY	
SUPPLEMENT WETTING			FED ON PASTURE	
WAZE SLAGE				

FARM OPERATION

NITROGEN DUE	DRILLING DUE
EFFLUENT <small>Wastage in feed etc.</small>	NOTES

STAFF	CURRENT ROSTER	TODAYS JOBS		THIS WEEK	
Name				AM	PM
				MON	
				TUE	
				WED	
				THU	
				FRI	
				SAT	
				SUN	
				MON	
	NEXT MEETING	ODD JOBS			
GROUP	OIL MAINTENANCE	(REPAIRS)	PARTS	ANIMAL HEALTH	
				TREATMENTS	SUPPLIES
	OIL MAINTENANCE	SUPPLIES	NOTES	NOTES	