

WHAT IS LEAN MANAGEMENT AND WHY IS IT SO EFFECTIVE ON DAIRY FARMS?

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Introduction

Most days, things happen to frustrate us...a tool you can't find, waiting for someone, information not up to date, running out of product, fixing something that's broken or fixing someone else's mistake...and the list goes on.

By the time we have dealt with these 'time wasters' you are lucky if you have done any REAL work!

How true is this? How often do we spend valuable time and energy on things that really don't add VALUE? Is this just the way things are? How do we escape this picture?

There are some key principals around raising productivity in your farm business that, regardless of size or scale, will help you to make your business sustainable and enjoyable for everyone involved for the long term. The challenge is how to get those systems in place, achieving quality results consistently... with the whole team on board, when we are already struggling to find enough time to do "normal" stuff. Applying LEAN thinking to the dairy farm business really can help you to find all that lost time and improve your productivity? However, it's not easy, it will require commitment and drive and an upfront investment of time and energy

How do we achieve the aim of long term, sustainable business productivity?

- Long term = over time
- Sustainable = repeatable consistently
- Productivity = value added activity.

The answer includes a number of steps:

1. Leadership

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2. Being prepared to change
3. Empowering our team
4. Identifying waste
5. Working out the root cause of waste
6. Standardising our solutions.

Most importantly though is the need to INVEST in ‘finding time’.

We will look at steps 4 to 6 first...

Finding waste

The reality is that there is a lot of waste in our lives – often both work and personal. Often we are so used to it happening that we don’t even recognise it for what it is. When was the last time you went looking for some information and couldn’t find it straight away because it hadn’t been filed? Or the correct spanner for the job hadn’t been put away in the right place so you had to go and look for it? Or you had to go and ask the boss what the next job was because he hadn’t written it up on the whiteboard?

Typically the definition of waste in business is “activity that doesn’t add value to the customer”. In a dairy situation that could be “activity that doesn’t add value to delivering as much high quality milk as we would expect from our system type, in a way that doesn’t compromise animal welfare, environment or people”. So reasonably complicated!

Waste can be categorised in to the following types:

- Motion (searching for information, tools, materials)
- Waiting (for people, products, animals, etc)
- Transport (transfer of information and materials)
- Storage (of information and materials)
- Defect (of information, product and materials)
- Over-producing (making too much product or doing it too soon)
- Excessive or inadequate processing (inefficient processes and procedures)

So what are some real examples of waste?

- Motion – putting up an electric fence but not having enough standards so have to go back to the shed to get more to finish the job.
- Waiting – the vat wash didn’t get done so can’t start milking until it is done.
- Transport – my manager forgot to tell me what drug to use to treat the cow, so now I can’t treat her till he comes back from his meeting.
- Storage – bulk buying calf meal and then not using it all.
- Defect – holes in baleage not taped up so baleage spoils and can’t be fed to the cows.
- Over-producing – made too much supplement and still storing some that is 3 years old.

- Excessive or inadequate processing – using twice as much water, and taking twice as much time, to clean the yard as another person in the team.

Can you think of some examples of each of these in your system?

- Motion –
- Waiting –
- Transport –
- Storage –
- Defect –
- Over-producing –
- Excessive or inadequate processing –

When we start to identify waste, we raise our awareness (and that of our team), it also means we can look at why this waste is happening so we can reduce it.

Identifying the cause vs effect

Often our natural tendency is to immediately FIX problems when we see them. That's our job as managers isn't it? The trouble is this is often just a 'Band-Aid' fix as we don't stop to figure out what is really **causing** the problem... we are just fixing the **effect**. For example, continuing to replace the fuse when it keeps blowing instead of calling the electrician to find out why it keeps blowing...

Understanding cause and effect is critical to successful problem or 'waste' solving.

Some tips to help you find the root cause of a problem:

- Clearly define the problem.
- Before 'blaming' a person, consider that in 90% of cases a problem is caused by a lack of knowledge, skill, resources or system. That is, the problem is with the PROCESS not the PERSON.
- Discuss the problem with the team, don't just assume you know what's going on.
- Consider things like, where, when and how the problem occurs.
- Ask 5 whys to work out what the real cause might be.

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Finding a solution

Once you have worked out the 'Real Cause' of the problem you need to decide if you can eliminate or just minimise the problem. Often problems can be solved with simple, low cost solutions. In fact many frustrating causes of waste on farm can be solved by getting organised and having better systems.

Key points when putting solutions in place include:

- Involve the team, they do the work every day and will often have ideas on how things can be improved
- Keep solutions simple, that way they are easy to keep doing
- Change takes time, you will be having to break old habits and create new ones, so be patient
- Where possible use visual reminders at the point of use to help the team to remember the new way of doing things
- Pictures are worth a thousand words, especially when English is your second language
- Measure your progress to see if the changes you put in place work or not
- If your solution doesn't work go back and check what you decided was the cause of the problem, maybe it wasn't...

Once we identify the solution that works we turn that into a Standard Operating Procedure ideally with some visual controls. None of this is rocket science, in fact it is common sense really and if we stop and think through a problem we will take a lot of these steps without having to step through it like this. However, following a process enables us to ensure we apply the right thinking consistently to get sustainable results. More importantly it enables us to teach our people to use the same approach and start to solve some of their own problems. This is where steps 1 to 3 are important

Steps 2 and 3...Being prepared to change and empowering our teams

Being prepared to change

Achieving long term, sustainable business productivity requires good leadership, including being prepared to change and empower the team.

Change = different from previous state

Change is more than just doing things differently, to get sustained change often means changing the culture of "how things are done around here". You have to work hard to achieve sustained change. When you plan carefully and build the proper foundation, then implementing change can be much easier and you'll improve the chances of success. If you are too impatient, and if you expect too many results too soon, your plans for change are more likely to fail.

Keys to success are: leadership; creating a sense of urgency (reason why); having others in the organisation who will embrace and drive change; build a vision (picture of what good looks like) and communicate it to everyone; remove obstacles; create quick wins and build on your momentum. These steps will result in a culture that supports and encourages change and improvement.

Empowering the team

Empowering the team is allowing them to own and drive how things will be done, often your team will be the best people to work out a successful solution to problems because they work with it all of the time. Surprisingly the solutions our team will often come up with tend to be low cost, highly effective and quick to put into practice. The other benefit is when they “own” the solution they are more likely to ensure it happens and that new people know how it works. People are generally also happier in their work, more inclined to stay and will use their initiative.

Step 1 – Leadership

To successfully achieve steps 2 to 6 you must be prepared to guide, drive, coach, empower, support, encourage, provide boundaries, enforce consequences, set the standard and practice what you preach...in other words LEAD.

Changing from how things are done now to a culture where the focus is on continuously improving how things are done requires INVESTMENT. Investment in time and energy. We get short term change when we dictate the solution to our team. To get long term sustained change requires leadership, we need to give our team the chance to influence the solution.

Can LEAN principals apply to dairy farming?

DairyNZ has funded the development of FarmTune® a Dairy specific programme using LEAN principals to help farmers improve and implement greater efficiency in their business.

The programme has been successfully piloted in Southland, Canterbury and Waikato and is now available to farmers across most areas. The results have shown that yes...LEAN

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principals can apply to Dairy Farming and they do provide on-going, sustainable results, including saving time and improving productivity.

Here is Murray's story...

Murray Bowden and his team from Mahanga participated in the 2016 Canterbury FarmTune® programme. Mahanga is 186ha, milking 780 cows located in Hinds, Mid Canterbury. The farm is part of the Rylib Group and Murray is the Farm Manager, Murray is also a member of the local SAR's team and can be called out at any time. Before the FarmTune® programme Murray had Mahanga running well with some good systems in place and a pretty lean cost structure, however, he was looking for ways to fine tune and streamline the day to day running of the farm and felt that LEAN would potentially help to achieve that.

FarmTune® enabled Murray and his team to refine the systems they already had and develop new ones to support the team to consistently achieve the day to day requirements regardless of if Murray was there or not. The confidence that this created for the team was significant, they knew what they had to do, there was no frustration at being left to figure things out. Murray could be confident that while he was away (often with no notice) the daily jobs would get done to the standard agreed. One of the benefits for Murray was the removal of that 'dread' of "what will I find when I get back?" The farm owners have also seen the benefits, with the changes on farm providing them with confidence that the day to day performance will be consistent no matter what else is going on.

One year on from the programme and the team is still engaged in the process, they consistently finish work at 4.30pm (saving an hour a day compared with before FarmTune®), they get their breaks, rostered days off and holidays. Having people on holiday doesn't create extra stress or pressure for the team and because they aren't tired, they stay motivated. They continue to have input into how the systems work and have agreed what the standards are and are motivated to maintain them because it works for them.

Although it is hard to put specific numbers on the savings and benefits, Murray knows they have made real improvements in the following areas:

- Reducing milking by an hour a day for the entire season = 7 hours a week less shed running cost.
- At the end of the season, the whole team has taken all annual leave owed = no carryover of annual leave.
- Regular maintenance is up to date and no major breakdowns for the year.
- Team is happy and finished up by 4:30pm each day.
- Easy to train new people with robust systems in place that mean training a new person to do tasks like the plant wash takes 3 days instead of 2 weeks.

- Team is engaged and looking for ways to keep fine-tuning and improving how things get done.
- Team is more confident to use their initiative and make decisions, as they have the support of systems to guide them in their decision making.

Conclusion

Yes we can achieve improvements in efficiency and productivity in our business by applying LEAN principals. To achieve sustained improvement you have to be committed to changing the way things are done in your business, including being prepared to let your team 'own' and drive some of the process. Following a programme like FarmTune® will improve your chances of success.

References

www.dairynz.co.nz/farm/farmtune/

www.dairynz.co.nz/farm/farmtune/waste-hunt/

Notes: