

Dairy factory optimisation



Objective

To identify the areas that will give the quickest return to the business whilst establishing longer term priorities

Introduction

Even the most well established and professionally run business can benefit significantly from an external review where an experienced dairy industry consultant can quickly help to focus on the areas that would benefit from change.

Commission an independent “rapid scan” of your manufacturing operation taking into account the latest trends / developments in Dairy Industry Technology.



How do we do this? – WHO? WHAT? WHEN?

Operations – preparing a Master Plan

Review of the manufacturing operations to confirm that the processes are stabilized, then review the flow (logistics) to ensure it is optimized for organizational efficiency. Review who does what and prepare a detailed organization chart (if not available), if available confirm that the chart is optimizing resources across the group

Performance management systems are standard practice amongst most large dairy manufacturing companies as these increase communication efficiency, management control and enable continuous improvement. These are integrated into the organization as way of working during meetings, by means of learning on the job up until it becomes second nature.

Back to Basics Prioritization: Concentrate on the quickest wins first.

Separate genuine constraints from operating assumptions and leverage human capital. (make best use of staff)

Split operating constraints into two lists, those that improve the cost performance of what is done now and can impact immediately.

The second is those longer term constraints that require some cost and profit analysis to determine things you may stop or change as a result of negotiations with the Sales group and customers in the future.

The former should be established first, with the second being the things that could be improved in a second wave.



List 1: Improve:

Those constraints that would have an immediate and beneficial impact:

In order to drive productivity we must probe deeper into where the opportunities are.

e.g. there is little change that can be made on input or commodity costs, “they will be what they will be”.
Likewise the cost per hour of energy and labour is fixed.

We need to establish how to run the equipment we have today, better and produce more with it, replacing or re engineering specific pieces only when we can prove the improvement exceeds the investment. The focus becomes making better use of the assets we have, so we need to keep a very close track of what goes wrong, for how long and what causes it.

Throughput analysis of key “bottleneck assets” will uncover “point improvement” opportunities.

These are all tactical and possible to address in weeks and without negotiation with customers:

Put simply: Can you do the same with less cost (you can, but it important that managers provide the answers to this in order to own it for their department and they need to be “led” into this by the consultant working with your teams)

ASK the questions:

- Same volume, fewer personnel or in less time?
- Same volume, fewer materials, stop- overfilling and yield losses?
- Same case count in less time, by speeding up changeovers, preventing speed adjustments and repetitive downtime incidents?

List 2: Consider:

To change what you do based on an analysis of its profit contribution:

For the same stock keeping unit, (SKU) use less costly materials or share the same materials across more product lines?

Fewer SKU's, longer, simpler to manage production runs?

Fewer pack size and materials variations, leading to longer, simpler more cost effective production runs?

In summary, attack the things that can be done in weeks and which have an immediate impact on the cost of current production activity.

The priority must be to identify and monetize these 'core' opportunities and understand the key barriers to improvement.

So, what are these "core" activities that we know matter in a typical production run's cost performance?

- Downtime & minor stoppage avoidance
- Changeovers over-running
- Machine settings adjusted by operators
- Slow running of the line
- Over filling of the SKU
- Yield loss through waste
- Lack of intervention action taking place during the run when these things occur as they will).

Addressing the last of these can provide the best opportunity for improvement in the shortest time-frame and can unlock potential improvements in all other areas: Human Capital is the key.

Back to Basics *people* productivity – leveraging your number one asset to generate profitability

Most hourly paid workers and supervisors are smart people.

They don't need an 'expert' continuous improvement management committee to guide them in every aspect of their jobs.

If staff were 15% more productive you could remove the 15% most disruptive, least productive and make everyone's life that much more pleasant. They are your secret, untapped "innovation".

Some Managers are in wrong locations, good people but playing in the wrong or multiple positions so should you consider, is it time for a small "management reshuffle"

Line staff can tell us exactly what causes equipment rate reductions, changeover delays, minor stoppages that go unrecorded and reasons for scrapped product. They are able to pinpoint the problem and do something about it.

Often we just don't ask them to do this, let alone equip them to systematically improve processes.



Obstacles – remove them

What prevents our people from acting and what “innovation” already exists to change this?

Visibility of the occurrence at the time it occurs, by the hourly paid workers, and absence of an organized working practice to follow when such issues occur.

A “Blame and penalty” culture is present in many businesses and this should be actively discouraged as staff who perceive a threat in attempting to do something will avoid doing anything so as not to incur the wrath and punishment of the company. (everybody wants to be safe and hide from controversy)

Let colleagues make mistakes and instead of looking for blame look to learn and strengthen from the mistake and avoid a reoccurrence. (we all make mistakes and poor not thought out decisions every day but without actually doing things, making decisions you will agree staff will not advance)

If someone makes the same mistake more than twice without good reason then it is time to consider the individuals future with the company and he / she will know this and will likely move on without help.

It is the duty of senior management to see to it that these factors are addressed.

Basic issues such as:

- Increase visibility of efficiency to line workers during their shift.
- Increase visibility of recoverable production losses and ensure it is recorded against the line operators.
- End of shift meetings, do they happen and are they based on actual performance not “all is ok”.
- Monitor changeovers times and if they vary dramatically and also go unchallenged from shift to shift.
- Equipment settings should be fixed from shift to shift, and monitored.
- Data capture in useful KPI's per shift should be implemented.



Back to Basics essential tools: applying proven innovations to harness human capital

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Watson Dairy Consultancy

2009 new factory completion

The new infant formula factory was officially opened in March 2007 by Dr Davoodi the Deputy President of Iran with the opening being televised on Iranian National TV and international news programs as the plant with a 15,000 tonne capacity ensures Iran is self sufficient in Infant Formula manufacturing



Fix the basics

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Gain control

Deleted

Improve
performance

Deleted

Commitment from the bottom must have full commitment from the top

Drive continuous
improvement



Understanding the effects on the business of management style

Delegating of authority responsibly

There are really only two major management styles:

Authoritarian and Democratic.

Every other style of management, whether it's termed coaching, parenting, team-building, remote-controlling, etc., is a variation on one of these, or a combination of both.

Authoritarian and Democratic Managers

Authoritarian managers are sometimes referred to as top-down managers or micromanagers.

Authoritarian managers expect staff to do what they're told and generally don't allow for dispute or negotiation.

Democratic managers are much more participatory.

They believe that seeking consensus with staff is the best way to draw on the broadest range of resources and thereby get the best results.

Democratic managers also believe that providing staff with responsibility and showing confidence in them helps them to develop as employees and as individuals.

In the long run, this also means less managing on the part of the manager.

A democratic manager will, at the very least, consider what you have to say regarding your assignment.

This means that your input won't be ignored, **and not** that a vote will be taken on your suggestion or that your suggestion is guaranteed to be implemented. go by a variety of names.

Which style is better?

Consider this statement:

“In today’s workplace authoritarian managers are never good managers”

Does this view makes sense, do people react well to being constantly given orders?

OK - Sometimes things just have to be done – no questions asked!
Authoritarian managers do have a place in certain situations and businesses.

When a democratically-inclined manager asks for input about a problem, he will still have to make a decision.

Of course, the decision will have a better chance of being the correct one if some input from more people is solicited and this also keeps people informed and closely involved.



Management style continued

A coach-manager will work with his staff much like you would expect a coach to work with an athlete.

A good coach knows that performance isn't just about the statistics, such as how fast the athlete ran the 100m.

Developing an athlete requires more.

A coach must know the athlete's strengths, weaknesses, personality, motivations, etc. and which is his best position to play.

This is learned by observing and listening.

A coach also requires a good amount of authority, to set and enforce rigorous training schedules.

A friend-manager will try to make sure that their relationship with staff is never just about the work. He will look for common interests

(e.g. music, sports, politics) and use those to build rapport with staff. Of course, a friend-manager still needs to manage, to ensure that work is done, but having rapport makes this task easier.

In the best circumstances, we do things for our friend-manager for the same reason that we do things for friends: because we like to and want to.

Taking into account that there is no escaping from Key Performance Indicators .

Key Performance indicators (KPI's)

Reporting formats & reporting frequency to be established with the consultant

E.g.

Cost of labour per tonne produced

Line utilization

Line Efficiency

Cost of Electricity per tonne

Cost of Water per tonne



Trust Your Subordinates

The Definition of Leadership

Leadership has been called "The ability to get followers."

Human nature requires us all to feel important, to have a sense of meaning and purpose .

Great leaders are invariably those who can tap into the deeper emotions of their colleagues and encourage them to continually perform above what they have achieved in the past.

Trust Other People

The key leadership in all case is to "trust your subordinates."

Many studies have concluded that it is the mutual bond of trust and respect that acts as the catalyst that creates high performance. **Not only must you trust your subordinates, but even more important, they must trust . Trust is obtained by “deeds” not “words”.**

Act With Integrity

Your subordinates must have an absolute belief in your integrity. They must believe that you will abide by the highest ethical standards of fairness and justice. Integrity appears over and over as the most important leadership quality. People can only put their whole hearts into their work when they feel secure and they can only feel secure when they can relax and trust you completely.

Leadership behaviour to bring out the very best from the people who report to you.

First, make people feel important. Tell them how important and valuable they are and then give them **both the responsibility and the opportunity to do their job the very best they know how.**

Second, set a good example. Be an inspirational leader by being a role model for everyone else to follow. The more people look up to you, the better they will do their work and the happier they will be.



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