Lean system for lean times

Andy Wight, Pathway Manager for Greenkeeping at Oakland's **College in Hertfordshire**, believes that the face of Greenkeeping is still not being pushed forward as a professional industry...

As part of my job I have the pleasure of visiting some of the best run clubs in the country and having worked in one form or another in the **Sports turf or Greenkeeping** industry for more than 30 years I have seen enormous changes in the quality of staff accommodation/workshops and course maintenance.

However during my travels I still see some places that do not push forward the face of Greenkeeping as a professional industry. Musing on this I was reminded of some concepts that I have studied from the automotive industry. I thought I might spare these thoughts with the readers.

Lean manufacturing is a principle that comes from the Japanese manufacturing industry. The term was first used by John Krafcik in a an article, "Triumph of the Lean Production System,"

The system is known as the 5 Ss and comes from a Japanese based system.

The 5 Ss refer to

- 1. Sort (Seiri)
- 2. Simplify or Set in order (Seiton)
 - 3. Shine (Seiso)
 - 4. Standardise (Seiketsu)
 - 5. Sustain (Shitsuke)

This leads to a system know as leaning a process. The objective of lean manufacturing is to save time and money but at the same time increase productivity and hopefully quality.

The aspects of this are to

- 1. Define customer need
- 2. Improve processes to zero deficiency by applying the 5 Ss
- 3. Reduce waste
- 4. Enhance flow

Streamlining will save money,

increase productivity and often lead to a higher quality product at the end of the process. We can look at how this process might be applied in the real world by taking a task like fairway mowing and applying the concept.

To streamline a process we would need to establish customer needs. For an example let us begin with the end user (i.e. the player) and establish the end product that has to be achieved.

You might ask yourself are my customers happy, the answer might well be yes, no one has complained, indeed everyone says the fairways are outstanding (you cross cut them at 12mm and cut them every 2nd day).

The issue here is are you offering a product that is not really sustainable in terms of costs, in addition is the product of a higher quality level than it actually needs to be to perform its role? If this is the case you are giving away both time and

The first step in making improvements is to establish the exact. customer need (these of course can be different from wishes). The involvement of all the parties involved i.e. players, the person/s who pay the bills and the staff is vital in establishing the actual need. Block cutting fairways may increase the speed of the task and decrease labour and material input and yet give a playing surface and level of customer satisfaction that is almost equal to that offered before the change. If this were to be the case then a large financial saving might be made.

Improving a process to zero deficiently

This means that a task is analysed from every aspect and honed until the minimum input in labour and materials is achieved.

example the manager will ensure staff are trained in every aspect of fairway mowing i.e. setting up the mower in the most efficient way, the most efficient routes around the course are worked out and agreed etc then time and money can be saved.

If this process is applied to every task on the course, large overall savings might be made.

Appling the 5 s to the Greenkeeper's work....

Sort

This refers sorting and removing rubbish, clutter from the shed/ office. Moving from paper based systems to PC based systems can improve work output, i.e. the less clutter the quicker things can be found. In the automotive industry equipment/materials etc that did not seem to be used were red tagged and removed from the work area into a holding area. It was often found they remained there i.e. they were surplus to needs but were kept "just in case". Removing junk frees up workspace and storage and can improve workflow rates.

Simplify

This refers to the simplification of a processes, this could go back to fairway mowing, the process can be simplified by adopting a simple mowing system. Also simple things like having the spanners, grease gun etc required for setting the mower in a set place and training staff in the most efficient method of setting up the machine will all increase workflow rates.

Shine

Again if we return to fairway If we carry on with the above mowing a clean machine will make



ABOVE: An Example of Shine applied to the workplace (a neat well ordered clean rest room with no clutter which portrays a professional work ethic to visitors to the Greenkeeper's

(Photo with Kind Permission of Phillip Chiverton - The Grove)



leaks etc easy to spot and put right before a breakdown occurs.

However the concept relates to ensuring the workplace as a whole is as clean and tidy as possible.

For example the mechanic who has all his tools in order on a wall board instead of jumbled up in an old tool box.

This should also relate to the staff area, a clean and tidy staff room will install an ethos that will allow the manager to build and improve on.

Standardise

M processes at work are standardised but managers should be able to make improvements that will save time.

i.e. standard paper work, systems and procedures such as setting and greasing mowers

i.e. all staff carry out the work in the most efficient manner (zero deficiency).

It is vital that staff are involved in

this process as they often have the best insight into how improvements can be made.

Sustain

This is the most difficult part of the concept and refers to the need to continue the process and apply it to new tasks and ensure staff and manager do not fall back into old habits.

Now the last 2 areas of the system come into play-reducing waste and enhancing flow.

These should fall out of the above i.e. if procedures are analysed and broken down savings in materials and labour should be gained.

Flow of work should also increase as staff carry out work in the most effective manner and the manager rids him/herself of that huge pile of clutter on the desk known a pending paperwork.

Now for a challenge look at one area of your operations e.g. pesticide application and apply the concepts raised so far I bet if you think hard you can make a change or two that could save some time or money.

Now imagine if you carried on with this mindset, what else could you achieve?

For those who are interested in finding out more Andy recommends the following

http://www.tpmonline. com/articles_on_total_ productive_maintenance/ leanmfq/5sphilosophy.htm

http://ezinearticles.com/?The-Five-Ss-of-Lean&id=1301944

http://en.wikipedia.org/wiki/ Lean_manufacturing

5S for Service Organizations and Offices: A Lean Look at Improvements Debashis Sarkar

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