

# How to be more sustainable with Lean

By Gary Cortés

A Lean and sustainable company will implement process improvements and sustain them for years to come.

**S**ustainability and Lean are now the big buzzwords or concepts in the horticulture industry. How can Lean help in your greenhouse sustainability efforts? In Lean technology, “standardization” is a key.

When processes and procedures are standardized, they are more predictable and sustainable. Sustainability in this case is the ability to implement improvements in a process, and be able to sustain those improvements. Unfortunately, in some Lean implementations, tremendous benefits are gained immediately but are not sustained over the years. A model Lean company is one that implements Lean, achieves results in the first year and then sustains and improves upon the benefits it has achieved. This continuous improvement is called kaizen (a Japanese word for continuous improvement).

## Unique issues

In the horticulture industry, growers face some issues that many other industries do not. The major challenges are seasonality and “tribal knowledge.”

Seasonality for most growers is having just six to 12 weeks during the year to make the majority of their annual sales. If you can succeed and survive these peak weeks, your year will likely be a good one. However, if you don’t achieve your sales targets for whatever reason, the year could be a financial disappointment or even a disaster.

## Seasonality

When companies implement Lean, they know the importance of being efficient. Yet, during periods of downtime, some revert to doing it the “old way.” This may indicate they want to be efficient only when they are busy, and it’s acceptable to be inefficient when business slows. When a company operates in this manner, it confuses the employees. They’re expected to work one way during peak periods, but work differently when business activities slow down.

With Lean, the key is to be efficient all the time. This

means that a company needs to run its processes as they were designed with Lean, regardless of how fast or slow business is. The only difference between peak seasonal periods and the rest of the year is that a grower may have fewer people working during the slower times.

## Tribal knowledge

Tribal knowledge occurs when individuals within a company know certain aspects of the business that no one else knows. Within your company, who creates the product availability plan, who routes the delivery trucks and who determines the staffing for the various processes? Is there any documentation available to describe how these various tasks are done? In most companies the answer is no.

So, what happens when any of the individuals who are responsible for ensuring these activities are completed leaves the company or simply wants to go on vacation? There is a huge void the other employees can’t fill. This practice is common in family-run companies that have continued to grow in size. The first-, second-, or third-generation owners, and even some of the long-time employees, have all the knowledge of how to do things.

Implementing Lean taps into the expertise and the techniques of these very knowledgeable people and documents these processes. This documentation provides consistency, repeatability, sustainability and flexible employees who can perform multiple jobs.

## Sustain Lean improvements

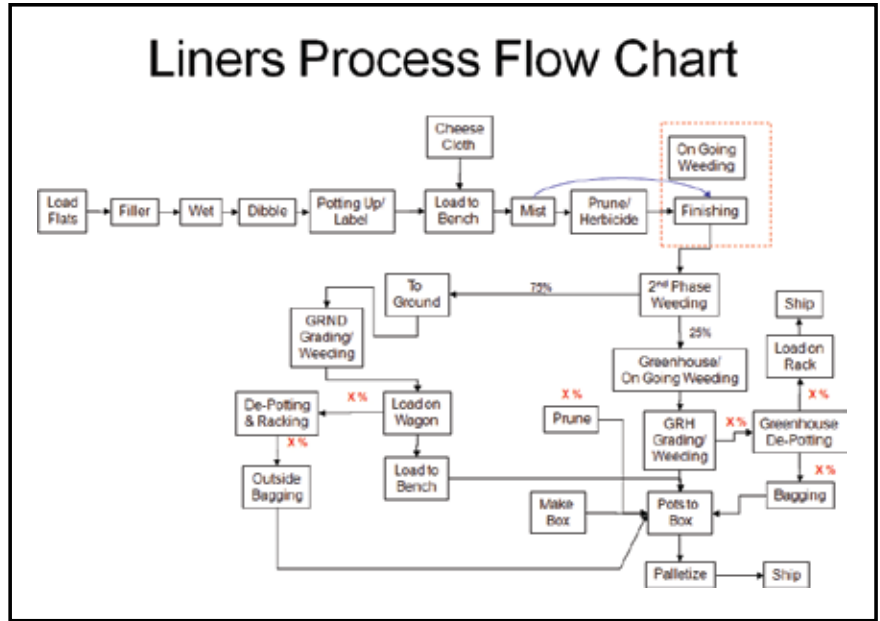
To resolve these issues within a company, and also to sustain the improvements achieved with Lean, there are certain tools available. These tools help to define and document a company’s processes and the work details or tasks in each process. These tools can enable you and your employees to understand what work needs to be done — correctly, safely and in the right order.

The first step in Lean Flow implementation is to define

your current “process flow.” The process flow defines the relationship of the processes from beginning to end. The processes that are documented can be for shipping, harvesting or sticking cuttings or processing a sales order or invoice in the office.

### Defining the work

Once the process flow is completed, the next step is to define the work in each process. Employees are often allowed to determine how the work should be done at their workstations. If there are 24 people packing orders, and each one is allowed to decide how the packing should be done, the result is 24 different ways to pack the plants. This creates a nightmare for determining the source of quality issues. If a document is created that details exactly how to pack the plants, and a packing-related quality problem arises, only the document needs to be corrected because it may have been written incorrectly.



The process flow defines the relationship of the processes from start to finish.

This document is a Standard Operation Worksheet (SOW).

The worksheet defines:

1. Work details or tasks.
2. If the work task is value-added or waste (work that a customer is not will-

## Structural Integrity...



This is a garden hose



This is a .....

ing to pay for, e.g., excess handling).

3. The time it takes to do the work.

4. The quality and/or safety associated with the work.

This worksheet is used to help design the Lean process and also as a new-hire training document. Employees are trained based on the way the worksheet defines work.

### Visual instruction sheet

Some growers have a workforce of employees that speak various languages. They may not communicate effectively in English.

The worksheet can be used to create another tool called the visual instruction sheet (VIS). This sheet converts text from the SOW into pictures. The visual instruction sheet graphically or digitally defines the work. In any language, a picture of what a plug tray should look like when it is ready to be shipped is the same.

The VIS defines the quality check

the employees need to comply with. Simple icons, such as a thumbs-up or thumbs-down, replace text. The sheet is easy to understand, illustrating key work, quality or safety.

When a company implements Lean Flow, it examines every process in excruciating detail, and documents how work processes need to be done. This effort helps a company sustain the benefits achieved with Lean Flow, eliminates the two ways a company runs during the year and also eliminates its dependency on tribal knowledge.

Talk to growers who have implemented Lean Flow. They will tell you that sustaining the changes and benefits they have achieved, as well as run-



The visual instruction sheet graphically defines the work.

ning their businesses the same way throughout the year, are the hardest parts of their Lean Flow efforts. In this tough economy, those companies that are sustaining their Lean efforts are the ones that will survive and thrive.

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