

Los Alamos National Laboratory

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LOS

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Introduction

Sandia National Laboratories is experiencing difficulties with a fragmented operating system created by Divisions working in isolation from one another. This has caused numerous different standards regarding important procedures such as onboarding, performance review, safety, & etc. It has also created inefficiencies and frustration across all of Sandia and led to inconsistent data transfer and company practices. In response, we need to help the LOS Team Identify best business practices to help craft and implement a Lean Management System at Sandia.

Methodology

After conducting meetings, interviews, and having discussions with Sandia employees we were able to determine key areas within Sandia that need improvement. From there we began to benchmark other companies and labs that are already using a Lean Management System. We centered our focus on how these companies utilize models and other tools to successfully standardize key operations that could be implemented at Sandia, as well as how they deployed the Lean Management System into their everyday practices.

LOS

After doing extensive research we have come to the conclusion of recommending Goodyear and Johnson & Johnson. Both these companies meet our criteria of being a large scale firm that is comparable to Sandia. They also both have R&D aspects intricate to their structure and utilize a Lean Management system that could be applicable to Sandia. Both Goodyear and Johnson & Johnson have a plethora of information that can be taken and applied to Sandia.

Johnson & Johnson

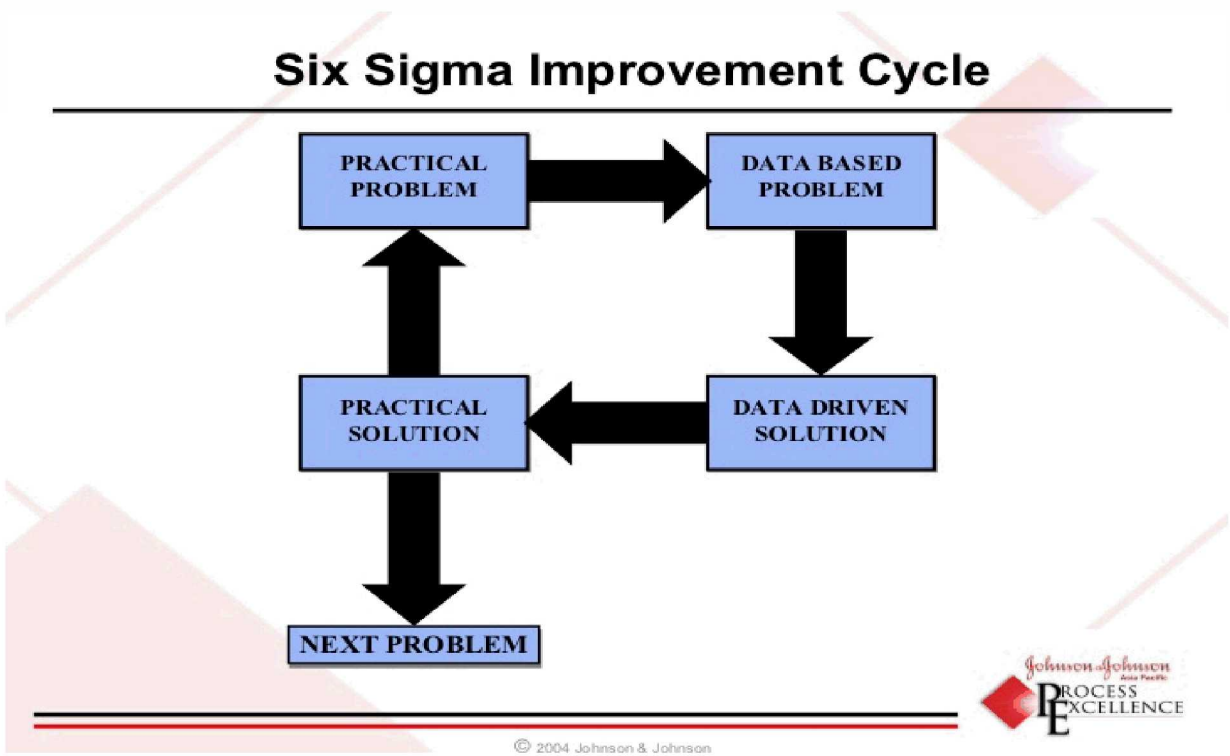
Johnson & Johnson integrated a Six Sigma and Lean Management System into their company several years ago, and have been improving upon it ever since. Their main focus is Process Excellence and have 3 key ways they are trying to achieve it:

1. Assessment- 6 processes: Leadership, Business Information and Analysis, Business Planning, Human Resources Management and Development, processes, customer and markets
2. Improvement- Metrics: methodology used to develop products/projects and or processes that consistently meet and customer requirements.
- “Execute with Excellence, Do it right first”

3. Recognition- identify things the company is doing well and what they need to improve upon.

Success: Change management, visibility, control

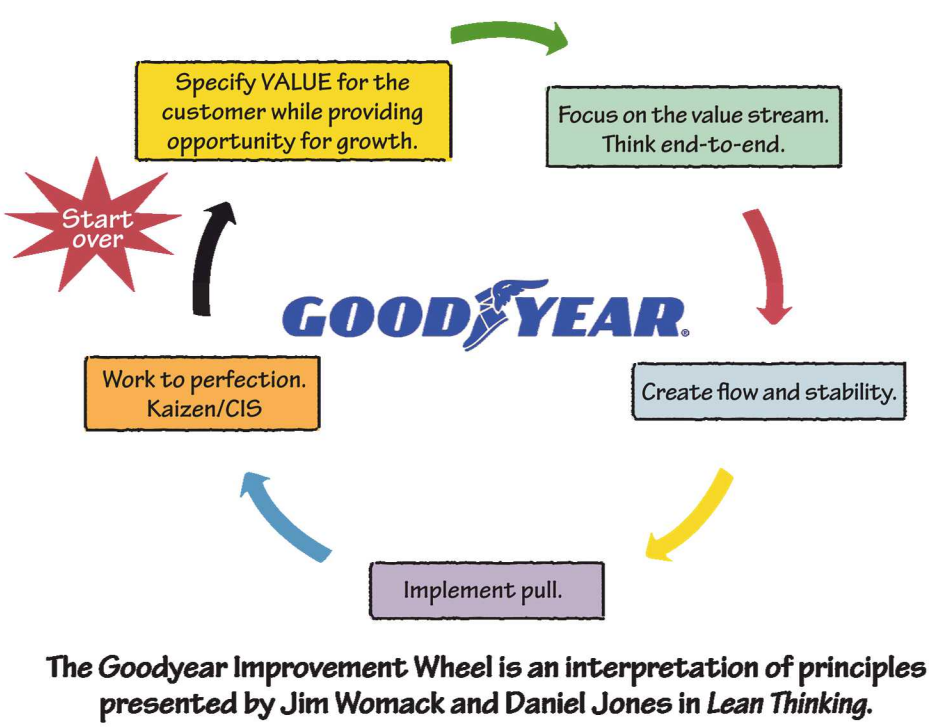
Failures: It does not stick, other initiatives come on board, management is impatient



Goodyear

Goodyear implemented a Lean Management System in 2008 and has been continuously improving it over the years. Using “5 Step to Get Lean” and “A3 Thinking”, Goodyear was able to eliminate waste and reduce their overall budget.

1. **Specify value for the customer:** Satisfy customer demands without occurring additional cost the budget nor deviating from key corporate objectives
2. **Focus on end-to-to value stream:** Understand how R&D and other contributors and stakeholders (marketing, manufacturing, procurement, etc.) fit in to the process, and how they should collaborate to create value for the customer
3. **Create Flow:** Everything should flow within every function or step of the value stream
4. **Implement Pull:** Where flow is not possible, the process should be designed to pull. Pull is effective in an environment of high variability, such as R&D
5. **Work to Perfection:** The fifth step is about having a process to continuously improve (A3 thinking, became the way Goodyear embraced, discussed, and solved problems)



TITLE: _____

Date: _____

Approval Date: _____

Owner: _____

Manager Approval: _____

BACKGROUND

What is the problem?

Write a sentence or two regarding the problem you’re trying to solve and why. Where does it fit in to your high level strategy?

COUNTERMEASURES

Write short sentences on how you will solve the problem for example: “Provide protective clothing to shop floor staff”

CURRENT STATE

When did the problem start?

Quantify the problem (e.g. time, cost, number of complaints) – use facts

Use visuals – tables, images, sketches, charts, drawings etc.

Show the problem clearly

PLAN

List a set of actions to be completed by whom and by when

ANALYSIS

Use the Cause and Effect diagram with the 5 Whys to identify the root cause of the problem

EVALUATE RESULTS

Review the results of your improvement and any ROI

FOLLOW UP ACTIONS

Wider issues may have been identified, so write a sentence or two regarding this