Sharing Your Lean System
For Total Success

How to use your Lean system
to all stakeholders benefit

Presented by
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Former VP at Toyota Motor Manufacturing
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Russ Scaffede Background

- General Motors
- Toyota Motor Corp.
- RWD Technologies
- Donnelly Corporation
- Tiara Yachts
- Toyota Boshoku U.S.A.
- Former Chairman, Shingo Prize Board of Governors
  - Author
  - Speaker
  - Trainer
  - Consultant
- Chairman, Board of Advisors, OPS Inc.

THE LEADERSHIP ROADMAP
People, Lean & Innovation

Dwane Baumgardner and Russ Scaffede

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Thinking Of Sharing As A Noun

- Share: A part of a larger amount that is divided among a number of people, or to which a number of people contribute

- Using this definition, we identify why many are not getting Toyota Levels of success
Three Objectives Today

- My Attempt To Explain Lean Is A System
  - Integration of People, Lean and Innovation

- Putting Lean Together To Create Customer Value
  - Taking your Lean tools to the next level

- Utilization Of Your Model For The Entire Organization
This Is A System Failure
Not A People Failure

- Your job as a Lean Leader is to make it easier for Team Members to Succeed than to Fail.
Toyota Chairman, Fujio Cho

“Many good companies try to practice kaizen and use various TPS tools. But what is important is having all the elements together as a system. It must be practiced every day in a very consistent manner - not in spurts - in concrete way on the shop floor.”
The Past And Current Identification With Tools

- **Past Very Early**
  - JIT/Kanban
  - Quality Circles
  - Problem Solving By Supervisors
  - 5S

- **Later**
  - Kaizen
  - VSM
  - Standardized Work
  - 5S/Visual Management
The Past And Current Identification With Tools

- Current
  - Six Sigma
  - Kata
  - A3 Problem Solving

No Tools Will Lead To A Systematic Approach Nor Will They Lead To “Total Employee Involvement”
Continuous Improvement By All T/M's

TPS
System Policies
JDOKA
Just In Time
Solid Support
Line Leveling (Prepared Ground)

TPM (Rock Support)
High, Consistent Equipment Availability

(Formulas, Policies)

Andon
Kanban
Process Control Chart
Quality Check Standards
Kaizen
Poka-yoke
STD Work
QC Circle
A-S
Leadership Commitment and Support

Go See    Ask Why    Show Respect

- Culture Centered on Patient Care
- Employee Engagement
- Servant Leadership (EPIC®)
- Cascading Annual Planning Process

The Lean System of Patient Care

Quality

Patient Satisfaction

“True North”

Employee Morale

Value Stream Analysis Process (VSAP®)

Cost

Safety

A3 Problem Solving

Mistake Proofing

Continuous Flow

PDCA

Pull Systems

5S/Visual Management

Standard Work

Objectives

Defect Free
Without Waste
Just-in-Time
Continuous Flow
Continuous Improvement

Principles

Patient Centered
Quality at the Source
Standard Processes
Engaged Employees
Pursuit of Perfection
Supplier Partnerships

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You Create Value for the Patient
By Creating Employee Engagement and Identity
Taking your tools to the next level

Learn the various Tools in great detail and apply what works for your organization understanding your Lean system
“Brilliant process management is our strategy. We get brilliant results from average people managing brilliant processes. We observe that our competitors often get average (or worse) results from brilliant people managing broken processes.”

Mr. Cho
Vice Chairman of Toyota
Achieving Lean Leadership

Advanced Product Planning

TPS

Marketing

Product Design

TPS

Production Engineering

TPS

Manufacturing

Human Resources

TPS

Corporate Management Team

Sales

Tooling Engineering

TPS

Product Planning

TPS

Product Engineering

TPS

Advances Process R & D

Product Launch Cycle (Updated Improved Standards)

Customer

Life Cycle Of Product (Continuous Improvement)

Highest Possible Quality

At lowest possible cost

Customer

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Total Employee Involvement

Scanlon Principle
- Identity
- Competency
- Participation
- Equity

OR

Lean Manufacturing System

Level
- Just-In-Time

Production
- Visual Delivery System

Machine
- Preventative Maintenance
- Total Productive Maintenance

Reliability

Stop the Line
- Traffic Light System
- Mistake Proofing
- In-Station-Process-Control

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People System

What’s The Improvement:

- Utilizing the intelligence of every employee allows for constant and continuous improvements when coupled with your Lean system and tools.

Tool Set:

- Participation, Identity, Equity, Competency Training, Team Leader Structure, VSM, Waste Identification, 5S/Visual Management, Hoshin

Departments Responsible:

- Executive Team
- Human Resource
- Every Department In The Organization
Most Important Tools Supporting People Engagement and Development

- Clearly defined competence model
  - with expectations of rapid utilization

- Clearly defined participation models
  - Area Work Teams/Quality Circles/Kaizen
Implement Basic Competency Training and Basic First Steps
At Toyota

- Standardized Work
- Problem Solving 1 and 2
- Waste Identification (Intro to Kaizen)
- Job Instruction Training
- Effective Small Meeting Facilitation

- All with a full expectation of immediate implementation with the Team Members
Participation

“Two reasons appear then for looking toward the fuller involvement of people in their work. We need their help in reaching for market leadership, and the people are entitled to the consideration that recognizes their ability to help. This process of involvement is what we call participation.”

- John F. Donnelly, 1967
In-Station-Process-Control (Jidoka)

- What are the Improvements:
  - Utilized to move all quality and cost control to be analyzed within the station. Whether machining or assembly signals at the first sight of any abnormality

- Tool Set:
  - Andon, Standardized Work, In-Station-Quality-Checks, TAKT, Team Leader Structure

- Departments Responsible:
  - Manufacturing
  - Manufacturing & Tooling Engineering
  - Product Development
  - Quality Control
  - Human Resource
Most Important Tools Supporting In-Station-Process-Control

- Standardized Work/ Job-Instruction-Training Methods
- Andon Communications/Team Leader Structure
- In-Station-Process-Control Check sheets
Organization to Support Continuous Improvement

Team Member

Team Facilitator

Group Leader

★ Critical Missing Link:
- Standardized Work
- Job Instruction Training
- Andon Response
- Daily Preventative Maintenance
- Control of Kanban Systems
- Small team Participation
  Leadership/Problem Solving
- Team Member Assist for Problems
JIT/Level Schedule

What are the Improvements:
- Controls all material in the entire value stream. Must be used to constantly reduce inventory and increase throughput.

Tool Set:
- Hijunka scheduling, Batch of one builds capability, Signal Kanban, Instruction Kanban, TAKT time, Material flow routes

Departments Responsible:
- Production Control
- Material
- Purchasing
- Supplier Quality
Most Important Tools Supporting JIT/Level Scheduling

- Kanban Visual Control
  - Process Kanban
  - Supplier Kanban
  - Signal Kanban
- Batch Of One Capability (Including Kitting if justified)
- Smallest Possible Batch Sequence Of Manufacturing
Equipment Reliability
Process Stability and
Total Productive Maintenance.

- What are the Improvements:
  - Without a stable process the system and tools of Lean will not yield maximum benefit. This improves uptime and mistake proofing capability

- Tool Set:
  - Total Productive Maintenance, Mistake Proofing, Machine Capacity Sheets, Machine Work Instructions, Man/Machine Standard Work Combination

- Departments Responsible:
  - Manufacturing
  - Maintenance
  - Manufacturing Engineering
  - Human Resources
Management’s Role in Lean

- Creating a Lean Enterprise Vision
- Developing a Strategy and Mission
- Providing Resources, Tools and Training
- Creating an Atmosphere that Fosters Participation
- Removing Barriers
- Walking the Talk
MANUFACTURING PHILOSOPHIES FOR CONTINUOUS IMPROVEMENT

**Quality, Cost, Productivity Safety and Morale**

*What:* Standards aimed at continuous improvement through the Elimination of waste

*Why:* Global competitiveness

*Tools used:* Management by Planning Visual performance measures

**In-Station Process Control**

*What:* Capability to identify, eliminate and prevent defects within station

*Why:* Lower cost
Less rework
Customer satisfaction

*Tools used:* Program Management Process
Standardized Work
In-Process Checks / SPC
Mistake Proofing

**Level Production**

*What:* Capability to identify, eliminate and prevent defects within station

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Mistake Proofing

**Work Teams**

*What:* Customer-focused aimed at continuous improvement

*Why:* Global competitiveness
Recognition of expertise

*Tools used:* All DPS tools to establish Standards and solve problems

**Equipment Reliability**

*What:* Up-time, Long life
Quality output

*Why:* Increased uptime
Meet customer requirements
Improve quality

*Tools used:* Process capacity sheet
Production PM (TPM)
Maintenance PM

**Just-In-Time**

*What:* Deliver the right products, at the right time, in right quantity to the right place

*Why:* Highlights waste
Smaller inventories
Customer-focused delivery

*Tools used:* Kanban
Quick Changeover
Pull System

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Questions?
Upcoming OPS Webinar Series

- Toyota’s Six Steps to Improvement by Art Smalley
  - Multiple part series
- Lean Basic Track: 6 Weeks, 1hr per week: Lean Intro and Problem Solving
- Lean Practitioner Track: 6 Weeks, 1hr per week per – Lean Basic is a Pre-Requisite
- Lean Leadership Track: 6 Weeks, 1hr per week – Lean Basic is a Pre-Requisite
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