Lean Leader Manual

How to Manage Operations in a Lean Environment



About the Author

Dan Burgos is an experienced business professional. With over 10 years of hands-on experience leading, and coaching organizations in identifying waste in their processes and leveraging break-through improvements.

Experienced in many industries, such as: Aerospace, Printing, Manufacturing, Distribution, Services, Government, among others.

As President of Alphanova Consulting, Dan helps middle market organizations improve their operations to become more efficient and profitable. While also focusing on developing a culture of continuous improvement.

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Contents

- Objectives
- What is the Role of a Lean Leader?
- 3. What Do Supervisors/Managers Do Today?
- 4. What "should" Supervisors/Managers Do?
- 5. The Typical Day In the Life of a Supervisor / Manager
- 6. What's Different in a Lean Environment?
- 7. 6 Keys to Managing Flow Cells
- 8. 9 Key Tools for Seeing Waste



Objectives

- Understand the changing role of the supervisor/manager
- Define success measures for each supervisor/manager
- Establish a method to visually track and communicate progress
- •Learn the keys to managing cells (lean tools) & demonstrate understanding
 - Learn how to <u>use</u> "Standard Work"
- Provide follow up start and track daily improvement



What is the role of a Lean Leader?

- To identify, address and resolve the issues that we contend with everyday.
- To establish a continuous improvement culture that develops and sustains the belief in self-destiny and winning.
- To gain control of our production processes and make them BETTER every day



What Do Supervisors/Managers Do Today?

- Prioritize schedules ("hot lists")
- Chase Parts (purchased parts, components, subs ...)
- Find material, tools, material handlers ...
- "Keep people busy"
- "Fire fight"
- How much time do your supervisors/managers spend "identifying waste"?

In most businesses
Supervisors/Managers are
really glorified "Expeditors"
or "Firefighters"



What "should" Supervisors/Managers Do?

- Manage "Flow" of materials (Visually)
- Adjust staffing (up and down) to current schedules (daily and hourly).
 I.e. operate to Standard Work ...
- Identify anomalies of performance (Production Control Boards, Standard WIP, kanban ...)
- Encourage associates to identify and eliminate waste
- Create environment where associates are responsible for identification ... assist in elimination of waste
- These are also the keys to sustaining the results from a Kaizen Event
- Ultimately, Supervisors/Managers <u>create</u> performance (Productivity, Inventory \$, Inventory Turns, Scrap, Rework, Quality ... etc)

50% = Identifying waste

50% = Eliminating waste

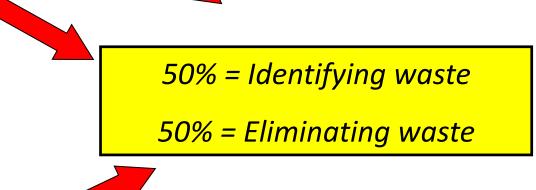


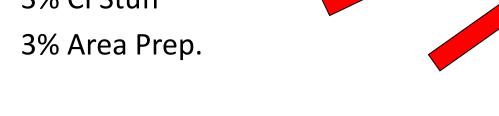
The Typical Day In the Life of a Supervisor/Manager

19% Directing Work Flow

13% Paperwork

- 6% Lunch
- 5% Ops Meetings
- 4% Area Meetings
- 4% Personnel Issues
- 3% Checking PCB's
- 3% CI Stuff





What's Different in a Lean Environment?

- Managers need to focus on the principles of Lean Thinking:
 - VALUE (what tasks should I "eliminate")
 - VALUE STREAM (how far does this part travel?)
 - FLOW (Can I complete a unit without setting it down?)
 - PULL (How does "paint" know when I need more)
 - PERFECTION (Get others to identify and eliminate waste)
- Supervisors learn and apply Lean tools, especially:
 - 1-PIECE FLOW CELLS (Manage a "cell" vs. 8 machines)
 - STANDARD WORK (the "current best way")
 - VISUAL WORKPLACE (manage in 10 seconds or less!)



What's Different in a Lean Environment?

- "Measurements are Good"
 - QUALITY
 - PRODUCTIVITY (hour by hour ... within each cell)
 - INVENTORY (Standard WIP, Point of use, internal "triggers", kanban)
 - DELIVERY (Meet your schedule Hourly)
 - DELIVERY LEAD TIME (Flow time through your cell)
 - Lean Conversions expect "Improvement in performance"
 - 8-15% Improvements are considered "minimum"

"Real" continuous improvement is measured by improvements made on the shop floor ... (without management even knowing about it)

•Step 1 "Identify" waste

Step 2 "Eliminate" waste



What Are The Targets?

- What measures will make us successful?
- Who owns these measures?
- Do you know what portion of the business measure you are accountable for?
- Is your portion of the measure "in control?"
- How much must you move your measure to get back on track?
- What system do you have in place to ensure results daily, weekly, monthly?



Remember Changes Are Personal Losses

- people have strong emotional reactions to changes
- we have these reactions with any personal loss

Investment

"my machine"

- INVEST TIME
- INVEST ENERGY

Commitment

- "Seniority"
- PROPORTIONAL
 TO INVESTMENT

Loss

- -"Change/Cells"
- A BREAK WITH SOMETHING YOU WERE COMMITTED TO

Recovery

- -"Change mgmnt"
- DENIAL
- BARGAINING
- ANGER
- DEPRESSION
- ACCEPTANCE



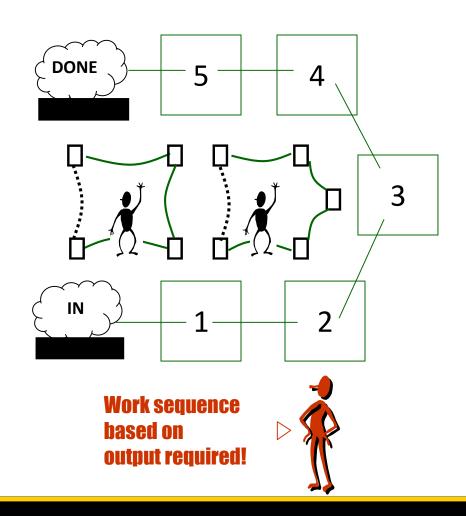
How Does This Affect Supervisors?

- supervisors are in a challenging position
 - We NEVER train them
 - CHANGE is happening all around them
 - EVERYONE is trying to adjust
 - The SUPERVISOR is learning as well
 - We still must SHIP ... their BOSS rarely understands what is really going on (with parts processing ... nor change management ...)
- Supervisors are caught in the middle
- most Supervisors struggle with this challenge
- Supervisors are rarely told "why" they are changing



One-Piece Flow (cells)

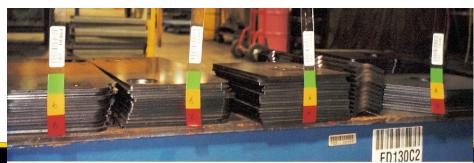
- Natural groups of parts or steps
- 1-piece flow inside the cell
- one operator could run the cell
- no birdcages or barriers
- U-shaped design
- multi-skilled people
- layout based on flow steps





Pull Systems

- Pull Systems link cells together
 - ONLY WHEN A SINGLE CELL IS NOT POSSIBLE
- all Pull Systems have three elements:
 - UPSTREAM "READY" where made, pulled when needed
 - DOWNSTREAM "IN USE" being consumed "now"
 - TRIGGER a signal (what, where, when, how many)
- Pull Systems trigger production activity
- Pull Systems trigger movement between cells
- Pull Systems are found between cells
- Pull Systems require discipline









The 8 Wastes

- learn to see and eliminate these and other wastes:
 - DEFECTS
 - OVERPRODUCTION
 - WAITING TIME
 - <u>N</u>EGLECTED TALENT
 - <u>T</u>RANSPORTATION
 - INVENTORY
 - MOTION
 - <u>E</u>XCESS PROCESSING

can you find

examples in your

business?

why are these

wastes there?



6 Keys to Managing Flow Cells

- 1: Attitude
- 2: Learn the Tools
- 3: Teach the Jobs
- 4: Drive Improvement
- 5: Build a Strong Team
- 6: Make the Numbers

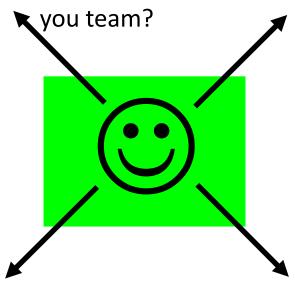


Key 1: Attitude

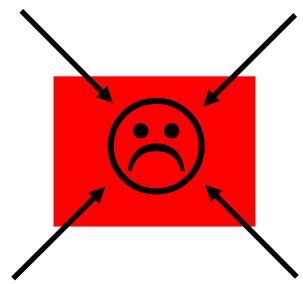
our attitude greatly affects our response to change

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Have you taken the time to explain "why", "what" and "where" to



do you make change happen?



does change happen to you?



Key 1: Attitude What is a Change Agent?

- Change Agents make good things happen
 - USUALLY IN A "BEHIND THE SCENES" ROLE
 - USUALLY MIDDLE AND FRONT-LINE MANAGERS
- successful Change Agents have...
 - COMMITMENT
 - COURAGE
 - CONSIDERATION
 - CAPABILITY



Key 1: Attitude Commitment

- Change Agents are committed to performance
- performance = measurements + action
- what is commitment?
 - MEASURING THE RIGHT THINGS
 - TAKING OWNERSHIP FOR THE MEASUREMENTS
 - SETTING HIGH EXPECTATIONS (TOUGH TARGETS)
 - DELEGATING AND MANAGING ACTION
 - HOLDING OURSELVES ACCOUNTABLE
- why is commitment important for change agents?



Key 1: Attitude Self Evaluation - Commitment

1=strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree I consistently "make the numbers" when I set goals. I start things by clearly understanding what's expected of me. I am comfortable with doing things that are unpopular. I realize that our company must get better to be competitive. I can always be counted on to "get the job done". I don't let people's fear of change immobilize me. I enjoy having my performance measured. I am impatient with how slow things are to change. I expect more of myself than others expect of me. I am frustrated by all the waste I see around me. TOTAL OUT OF A POSSIBLE 50 POINTS



Key 1: Attitude Courage

- how do you handle the tough stuff?
- difficult decisions? holding people accountable?
- how do you face weak performance?
- courage means:
 - CREATING HEALTHY DEBATE
 - INSISTING ON FINDING SOLUTIONS TO OBSTACLES
 - BEING WILLING TO TAKE PERSONAL RISKS

why is courage important for change agents?



Key 1: Attitude Self Evaluation - Courage

1=strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree It is more important to me to be respected than to be liked. I expect that there will be resistance to change. I am not stopped by someone saying "we already tried that". I am not afraid of arguing with my boss if I believe he or she is wrong. I am willing to argue with people who disagree with me. I enjoy challenging people to see things in a new and different way. I am willing to take an unpopular position if I believe in it. I enjoy trying to accomplish things most people think are impossible. I believe in having constructive confrontations when necessary. I am not afraid of taking risks in order to do the right thing.



TOTAL OUT OF A POSSIBLE 50 POINTS

Key 1: Attitude Consideration

- do your actions show that you care about people?
- support for change needs to be earned:
 - WHERE ARE WE GOING?
 - WHY ARE WE GOING THERE?
 - WHAT'S IN IT FOR ME
- consideration means:
 - ASKING FOR INPUT AND REALLY LISTENING
 - EXPLAINING TWICE AS MUCH AS YOU WANT TO
 - FINDING WIN / WIN ALTERNATIVES
- why is consideration important for change agents?



Key 1: Attitude Self Evaluation - Consideration

1=strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

I care deeply about people.
I think its important to communicate with the members in the cell.
I take time to hear what people think about an idea.
I seek and listen to input before making important decisions.
I involve people in changes that affect them.
I am willing to do the important "top-down" work respectfully.
I want people to feel respected even if they disagree with the path.
I clearly explain where we're going and why.
I insist that we treat people with fairness.
I insist that we treat people with respect.

TOTAL OUT OF A POSSIBLE 50 POINTS



Key 1: Attitude Capability

- we expect people to know what they're doing...
 - PILOTS, DOCTORS, WAITERS, ACCOUNTANTS, TAXIS...
- capability means:
 - YOU HAVE THE BASIC SKILLS TO DO THE JOB
 - YOU KNOW WHAT YOU ARE TRYING TO ACCOMPLISH
 - YOU KNOW HOW TO ACCOMPLISH IT
 - YOU CAN MANAGE THE PATH FROM HERE TO THERE
- why is capability important for change agents?



Key 1: Attitude Self Evaluation - Capability

1=strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree
I start projects by clearly understanding the desired end-state.
I clearly write down the desired end-state before starting a project.
I make sure that teams I lead clearly understand the desired end-state.
I describe the desired end-state in terms of #'s and action expected.
I actively study World Class tools and principles (TPS, Kaizen, Lean)
I make sure I learn the best ways to accomplish the end-state.
I learn tools and processes well enough to teach them clearly.
I am willing to learn new tools and best practices from others.
I am good at assigning work to other people (they get it done).
I am good at managing the daily progress of a project.
TOTAL OUT OF A POSSIBLE 50 POINTS



Key 1: Attitude Self Evaluation Summary

what are your scores (each one out of 50):

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/50 commitment/50 courage/50 consideration/50 capability
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/ 50 AVERAGE SCORE

what are your strengths? what do you want to improve?



Key 1: Attitude starts with the Manager!

- Have you taken the time to explain the desired "result" to your team?
- When asking for fundamental change, you must cover (2) principles:
 - "What's in it for me"
 - "Does it make sense to me"

Remember that this is a "Learn by doing" process AND *you* have yet to Learn or do ..."

At any level, your ability to achieve buy in and **build** upon improvements starts with these 2 questions



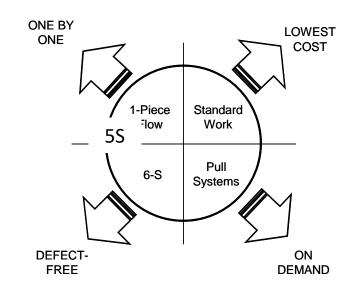
Key 2: Learn the Tools

supervisors need to learn and apply these key tools:

(Manager's must learn them first!)

- 1-PIECE FLOW
- STANDARD WORK
- **–** 5-S
- PULL SYSTEMS
- VISUAL WORKPLACE
- CORRECTIVE ACTION

"Lean" is a learn by doing process!!



Key 3: Teach the Jobs

- supervisors need to understand the jobs in their area:
 - DEFINE EACH JOB (Develop Standard Work)
 - BE ABLE TO DO EACH JOB
 - BE ABLE TO IMPLEMENT THE CONCEPTS OF "IDENTIFY WASTE" ... "ELIMINATE WASTE"



Key 4: Drive Improvement

- successful supervisors drive improvement
- they implement/teach tools to help "identify" waste:
 - Production Control Board
 - Visual Management (6S, Standard WIP, Bar Charts)
 - Standard Work (The "current" best way)
- they prioritize what to improve
- they initiate Rapid Improvement to eliminate waste:
 - EVENTS
 - PROJECTS
 - DO-IT'S



Key 5: Build a Strong Team

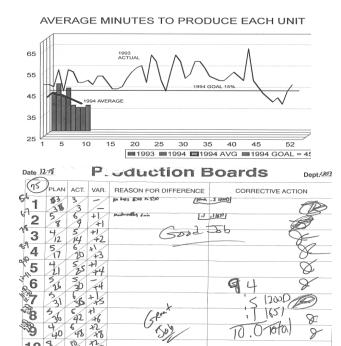
- Supervisors/managers need strong teams
- team deficiencies land on the supervisor/manager's shoulders
- focus on these fundamentals:
 - DESIGN THE STRUCTURE CAREFULLY
 - TEACH THE FUNDAMENTALS (Prod Control Board, Kaizen Newspaper, Standard Work, Standard WIP)
 - SELECT "GRADE A" TEAM MEMBERS (top 10% of people who would do that job for that money)
 - ACT WITH INTEGRITY, FAIRNESS AND RESPECT



Key 6: Make the Numbers

- Define meaningful measurements and targets
 - QUALITY
 - PRODUCTIVITY
 - DELIVERY (on-time and lead-time)
 - INVENTORY
- Measure!! Look at trends ...
 - Hourly
 - Daily
 - Weekly
 - Monthly







Standard Work: A Management System

- Standard Work is a system for managing cells...
 - CAPACITY
 - LAYOUT
 - MATERIAL FLOW
 - WORK ASSIGNMENTS
 - STAFFING LEVELS
- "Batch" manufacturing expects "maintenance of performance"
 - 2-3% Improvements are considered acceptable
- A Lean Conversion expects "Improvement in performance"
 - 8-15% Improvements are considered "minimum"



ABOUT US

We are Alphanova Consulting.

A Management Consultancy supporting middle market manufacturing, distribution, printing and service organizations through the implementation of operational excellence throughout their businesses.

We strive to build partnering relationships with our clients for their long-term success.

Let's partner for your improvement and growth!

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