WELCOME TO TPS
(THE ESSENCE OF TEAM MEMBER DEVELOPMENT)

Millie Marshall – TMMI President

Safety Commitment: I will not walk by an unsafe act without positively addressing it.
PERSONAL BACKGROUND
IN THE BEGINNING

• One of Four Children – “Middle Child”
  – One older brother and a younger brother and sister (twins)

• Joined 4H in early teenage years
  – Started showing horses and became devoted
  – Continued showing until age 25

• Education: Non-traditional Student
  – Associate Applied Science
    • Data Processing
  – Bachelor of Arts
    • Organizational Leadership
MY PASSIONS

Family

Fun

Fur
PROFESSIONAL CAREER
PROFESSIONAL PATH

• Joined Schneider Electric at Age 21
  – Engineering Administrative Role

• Transitioned Roles at Age 25
  – Computer Room Specialist (third-shift)
  – After six months, third-shift was not for me

• Returned to College “Non-Traditional”
  – Worked full-time
  – Completed an Associate Degree
    • Computer Technology
JOINED TOYOTA

TMMK
1991 - 1999 IT
2000 - 2003 IT/HR

TMMI
2017 - President

TMMAL
2003 - 2005 GM, Administration

TEMA
2006-2008 IT
2008-2012 HR
- Lehman Shock
- Unintentional Acceleration
- Tsunami

TMMWV
2013-2014 SVP
2014-2017 President

TOYOTA ALABAMA

TOYOTA KENTUCKY
TPS INTRODUCTION AND LEADERSHIP STYLE

Training provided to all members of the Toyota organization as a foundation into TPS.
THERE IS NO “SECRET SAUCE” FOR TPS

Common misconceptions:

• There’s a recipe for success

• There’s a step by step routine for implementation

• TPS is a secret

The Truth about TPS:

• Requires buy-in at all levels

• Requires culture establishment

• Requires strong discipline
  – Takes years to develop

• Is NOT a secret
  – Many books have been written

• Requires Healthy Tension
  – Get uncomfortable
STABILITY TRIANGLE

"LEADERSHIP STYLE"

Kaizen - “Continuous Improvement”

TPS

Team Member

T/L & G/L

AM

Mgt Mgr

Comm

Mgt Systems

Stabilize

Standardize
ACHIEVING SUCCESS THROUGH TPS

- Toyota Production System

- A Philosophical Framework and Method upon which Toyota bases its Manufacturing and Business Practices

- The basic principle of TPS is the absolute elimination of waste
COMPANY GOALS

Carrying Out a Social Mission

Offer quality products at the right time, at a reasonable cost

Pursuing Profits

Sustain corporation requirement to secure profits

Long term stable employment

Improve Team Members living
IMAGE OF TOYOTA PRODUCTION SYSTEM

Kaizen
Visualize Waste

Flexible, Motivated Team Member

Maintenance of Standards

Standardization

5S | Visual Management | Standardized Work

Goals/Desired Outcomes

Philosophies

For the Customer
Highest Quality
Lowest Cost
Shortest Lead-Time

For the Team Member
Work Satisfaction
Job Security
Consistent Income

For the Company
Market Flexibility
Profit (from cost reduction)

Customer First
Respect for Humanity
Elimination of Waste
TEAM MEMBER DEVELOPMENT – WHOLE BODY APPROACH

- **Physically**
  - Prepare the body
  - Fundamental Skills
  - Senses
    - Sight
    - Hearing
    - Smell
    - Touch
  - “Industrial Athlete”

- **Psychologically**
  - Engage the mind
  - Develop Kaizen thinking

- **Emotionally**
  - Develop Connection
  - Sense of belonging
  - Sense of Value (Mendomi)
PHYSICALLY - PREPARE THE BODY

**Work Conditioning**

- Prepare the muscles

**Fundamental Skills**

- Fundamentals for success!
- Utilization of all senses.
TEAM MEMBER DEVELOPMENT – STAIR STEP APPROACH

TPS Basics:

• Standardized Work, 5S, Visual Mgmt
• Why is it important?
• Involvement from the Team Member.

TPS Basics: Fundamental skills and standardized work
EMOTIONALLY – PREPARE THE HEART

Connection Development

- Ability to solve problems
- Ability to find problems and tasks
- Ability to exercise leadership
- Ability to give a presentation
- Improved communication ability

Sense of Belonging/Value (Mendomi)

1. You can easily talk to other people in the same workplace.
2. Your opinions can be listened to.
3. Cooperative atmosphere and good human relationships can be established.
4. Members can cooperate with each other.
5. Members can understand each other.
6. Members can consult with each other.
TEAM MEMBER APPLICATION

Standardized Work Applied

• Team Members provide input to improve

• Problem solving

• Tools to help: Quality Circles; Toyota Job Instruction, etc.
PSYCHOLOGICALLY – PREPARE THE MIND

Engage the mind
• Create an environment of idea sharing and problem awareness.

Develop Kaizen Thinking
• Improve operations every day!!
TEAMS MEMBER APPLICATION

Management Systems

- Manage issues and track progress
- Toyota Business Practices
- Floor Management Development System

Addressing Larger Issues

- Jishuken: a problem-solving activity that uses “fresh eyes” to observe and propose solution to defects within the manufacturing process.
**Hoshin: a business plan.**

- Breakthrough ideas that are used to develop many of the projects in a department.
APPLYING TPS CONCEPTS
TPS KAIZEN – LINE BALANCE QUIZ

Kaizen Process to Reduce Muda

What is best condition for line?

A. 11” Takt
   11” 10” 5”

B. 11” Takt
   11” 11” 4”

C. 11” Takt
   9” 8” 9”

What is best condition for line?
• Cycle Time Should = Takt Time
• Brings a problem to the surface
• Then:
  -- We can add work from elsewhere
  -- We can move work elsewhere
  -- We can kaizen 11” processes, and move work there
PROCESS OBSERVATION EXAMPLE

Observing Team Member motion to reduce burden, process fluctuation, and cycle time [where possible]!
TPS HOUSE

Kaizen
Visualize Waste

Flexible,
Motivated Team Member

Maintenance of Standards

Standardization

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<tr>
<th>5S</th>
<th>Visual Management</th>
<th>Standardized Work</th>
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Goals/
Desired
Outcomes

Philosophies

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THE AIM OF THE TOYOTA PRODUCTION SYSTEM

Reduce Costs by Thoroughly Eliminating Muda

1. Produce only saleable products
   - Just in time production based on Takt time

2. Make high-quality products
   - Promotion of Jidoka (Quality Built-In)

3. Sell products at reasonable prices
   - Thorough elimination of Muda (Waste)

4. Create a flexible, strong & organized workplace.
   - Training, process versatility, HRD etc
TOP 5 LESSONS OF TPS

Lesson #1

• You Must Unlearn What You Have Learned
  – TPS (at times) seems to contradict many “traditional” operations management practices:

• Less inventory is better.
• Exposing problems (and the pain that goes along with them) IS the goal.
• Being uncomfortable is desirable.
• Overall system efficiency is better.
• The process is as important (or maybe even more important) as the result.
• Simple, manual systems may be better than complicated & technical systems and processes.
TOP 5 LESSONS OF TPS

Lesson #2

• *Do or Do Not. There is no Try!!!*
  – TPS is *learned by doing*, under the guidance of a mentor, not in a classroom, seminar, or through a PPT presentation or Slideshow.

  – You must take action to move forward. Go do something.
TOP 5 LESSONS OF TPS

Lesson #3

• *Develop Others*
  – Teaching and developing others is the most important role of a leader.

  – Pass on what you have learned.
TOP 5 LESSONS OF TPS

Lesson #4

• *Your work is never done*
  – Even if you’ve been doing this for a while, don’t pat yourself on the back. There are always many more problems and much learning ahead.

  – The journey to true north is **NEVER** over.

  – Learn from your experiences, contemplate and reflect on them. Then continue the journey.

  – There is more learning that you can be a part of.
TOP 5 LESSONS OF TPS

Lesson #5

• Never underestimate the power and abilities of people
  – TPS is about building the capacity in people to solve problems and make improvements. The target condition is: EVERYBODY, EVERYDAY DOING KAIZEN.

  – Never underestimate the power and abilities of people to make positive change.

  – The experts that do the work every day have the ideas and answers. Our task is to pass on our own experience so that they can make changes. Changes that improve the safety, quality, productivity, and cost.
“Don’t look with your eyes, look with your feet. Don’t think with your head, think with your hands.”

“Having no problems is the biggest problem of all.”

TAIICHI OHNO – “FATHER OF TPS”
THANK YOU!!

Questions????