

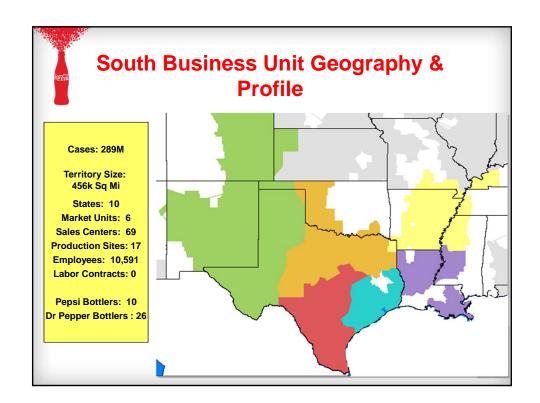






Presentation Goals

- Share my personal lean leadership story
- Share some of the highs and lows of a lean transformation
- Share some key lessons from the journey







Mr. Yamada



- Leading expert in:

 Production Control
 Pull Systems
 Kanban
 Scheduling
 Logistics and Material Handling
 Information Systems
 Capacity Planning
 Flow Kaizen
- 40 years of experience implementing lean manufacturing concepts
- Created Toyota's bar-coded Kanban system
- Oversaw the creation of Toyota's production scheduling algorithm
- Consulted at Delphi Corporation from 1998 to 2009

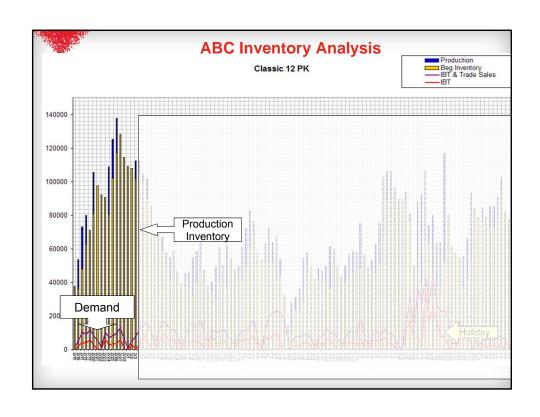


Early Identified Opportunities

- Too many locations
- Not the right inventory (OOD, OOS, Shrink)
- No linkage between parts of the organization
- Everything was treated as unique (no standard work)
- No flow

Mr. Yamada wanted an END TO END project

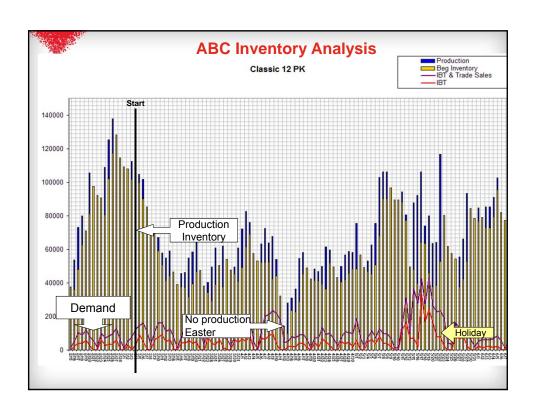
















Scheduling Kaizen Flexibility to Match Demand

Old Scheduling System Changeover Priority

- Minimize Changeovers
- Large Lot Size

Changeover

- Cans: 1-5 times per day
- PET: 1-3 times per day {12/12/20/20/.5L}
- Glass: 1-2 times per week

Run Strategy

Sequence to minimize CIP

New Scheduling System

Changeover Priority

- Cans: Flavor * Package
- PET: Bottle Size * Flavor * Package

Changeover

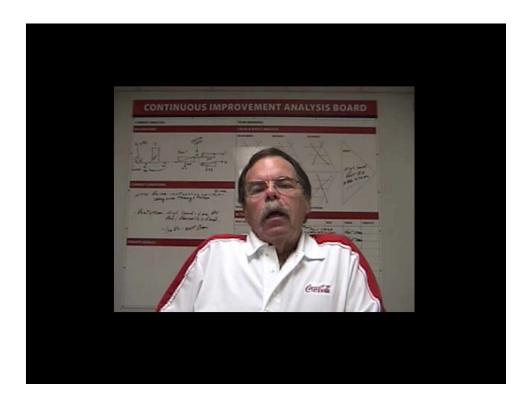
- Cans: 7-8 times per day
- PET: 7-8 times per day {12/20/.5L/12/20}
- Glass: TBD times per day

Run Strategy

- Hi (A) Daily
- Med (B) Once-Twice/Week
- Low (C) Once/Two Weeks





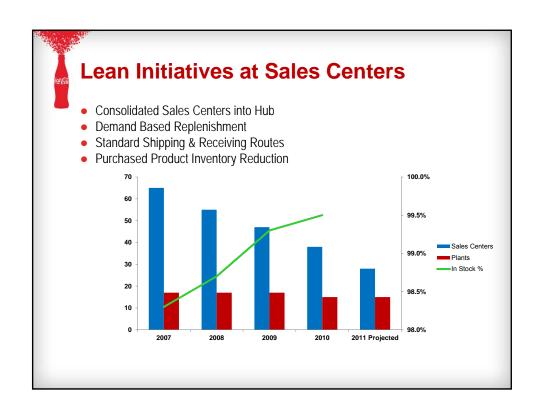


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Intellectual vs Emotional Buy In and What I would do different next time

- Data and quick wins will get you intellectual buy in
- Without personal participation, emotional buy in doesn't happen
- Make sure line leaders are leading the effort, not just supporting from the side lines





What have we accomplished? Eliminate Waste * Reduce Variation * Compress Lead Time

Target Area	Original State '09	Current State '10	% Improvement
Warehouses/Combos			17%
Production Facilities			12%
Scrap			36.5%
Inventory (avg.)			20%
Customer Service (OOS)			28.5%
Customer Service (OTIF)			17%





- Always be open to change when opportunity presents itself
- Don't let pride or ego get in the way
- Standard work is great. But, have plans for special causes like holiday variation
- The importance of paradigm shifts
- Participation is the only way to secure buy in
- Be prepared for the rest of the ice berg

