

# **Welch Allyn Supply Chain Overview**

Andy Clapper and Tom Doherty

## **MDISCC Meeting**







December 2, 2009

# Company Profile

- **Founded:** 1915
- **Business:** Global developer and manufacturer of medical devices and technologies
- **Ownership:** Privately-held (family-owned)
- **Corporate headquarters:** Skaneateles, N.Y.
- **Operations:** Sales, service, research and development, and manufacturing facilities in more than 50 countries
- **Employees:** 2,300 (worldwide)
- **CEO:** Julie A. Shimer, Ph.D.



# Welch Allyn: Key Markets

Long-Term Care	Office-Based Clinicians		Surgery Centers	Small / Rural ↔ Large / Complex Public / Private Hospitals	
	Nurses and Clinicians	Primary Care		Specialists	Surgeons
					
Low-Acuity Vitals Thermometry BP	Physical Assessment Low-Acuity Vitals Thermometry	BP Vag Specs Cardiology Eye and Ear Care	Low-Acuity Vitals Thermometry BP Monitoring	Monitoring Systems Low-Acuity Vitals Core Products Diagnostic Cardiology	Physical Assessment Low-Acuity Vitals Thermometry BP Vag Specs

Welch Allyn is the *only company* focused exclusively on the needs of Frontline Care

# Welch Allyn Background

## 1) Revenue:

> \$600M/Year

Roughly 65% US&C and 35% International

## 2) Manufacturing:

Skaneateles, NY = HQ and Largest Manufacturing Site (3 Locations)

Tijuana, Mexico = Built in 2006, 2<sup>nd</sup> Largest Mfg Site

Beaverton, Oregon = 3<sup>rd</sup> Largest Site

Jungingen, Germany and Navan, Ireland = <10% of Revenue

Asian Based Contract Manufacturer (new in 2009)

## 3) Portfolio

Over 5000 Active SKUs

500 to 800 Typically Stocked by our Distributors

## 4) Supply Chain Current State (2008 - 2009):

Primarily Through Distributors

Primarily a Make to Order Model for US Distributors/Customers

Ship from Stock Model for most International Distributors/Customers

Default = 7 Calendar Days – Order Date to Shipment Date

High Volume Consumables now TAKT + Ahead/Behind Inventory Rails

Ship from Manufacturing Source to US Customers and Int'l WH (No CDC)

**WelchAllyn**<sup>®</sup>

Advancing Frontline Care™

# Kevin's Requests

## Welch Allyn Feedback on 2 - 4

- 1) A 15-20 minute talk about your recent/current and planned improvement initiatives.
- 2) Touch on how Healthcare Reform is or is not impacting your initiatives. **Modest Growth Opportunity but Not Really Relevant to Supply Chain**
- 3) If appropriate, touch on adoption of Data Standards but **DO NOT FOCUS ON STANDARDS. Limited Activity to Date – Know we need to turn up the heat in 2010.**
- 4) If you are a Provider or GPO, talk about the things that would be relevant to manufacturers. **No comments.**

# Supply Chain Overview Topics

## The Remaining 12 to 17 Minutes

- 1) Operations Excellence – how we defined it.
- 2) Lean Journey and Extension to Supply Chain.
- 3) Supply Chain Initiative Objective, Charters and Projects for 2009 and 2010.
- 4) Some Thoughts on Future Opportunities

# ---Operational Excellence---

## In 2007 Defined What Does It Look Like?

### 1) Safety:

- Reduce OSHA recordable to World Class (50% Reduction/Year to Top Quartile of <2.0)

### 2) Quality/Regulatory:

- Regulatory Compliance is a MUST!
- Reduce both “internal and external defects” on key improvement targets by 10x in 3 years

### 3) Delivery:

- Drive OTIFNE (On Time x In Full x No Errors) performance to >90%.

### 4) Cost:

- Drive Delivered Cost Reductions that offset inflation and deliver an incremental 3% to 5% annually

### 5) Inventory:

- Drive Inventory from approximately 4 turns towards double digits (6.0 by 2010)

# Welch Allyn – Lean Journey









- Started in 2005 with RIT GB/BB and Oregon Lean Consortium
- Hired several seasoned lean practitioners
- Adopted Toyota Production System as the way we were going to drive towards Operations Excellence
- 2005 - 2008 = Operations Focused
- 2009 – 2010 = Expand upstream into strategic suppliers and downstream with strategic distributors/customers

# Early in the Journey

## Some Lean Tools/Concepts:



 = Working Applications of the Tool

-  • 5S/TPM
-  • Morning Market
-  • Kaizen
-  • Heijunka
-  • Poka Yoke
-  • Value Stream Mapping
-  • Kanban
-  • Hanedashi
-  • Takt Time
-  • Line Design
-  • Visual Controls
-  • Gemba
-  • Jidoka
-  • Single-Piece Flow
-  • SMED
-  • 3P

# Initiatives

1. Cut OEE & Capacity Improvement
2. Supplier Delivery/Quality Performance Improvement
3. Fabrication OEE & Capacity Planning
4. PA Cell Measures, Performance, Learning, Education, and Support Network
5. Improve Mail Handling Oversight of Focus on Inventory Accuracy
6. Improve Large Order Process (especially International, GenB)
7. SMT Safety Initiative
8. Facilities Expansion Project
9. Reduce Cover OEE & Capacity Improvement
10. Improve SLOP Process
11. Line Heaborg (Target 2.4 cells)

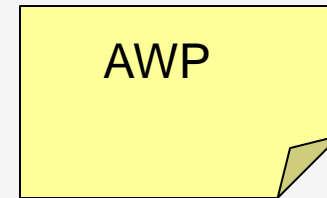
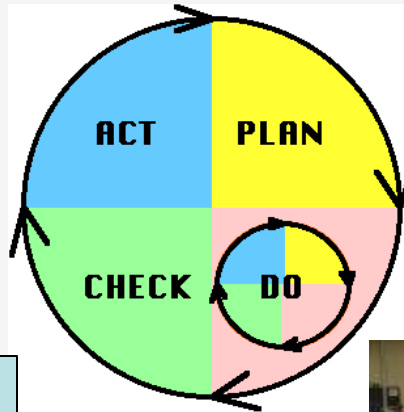
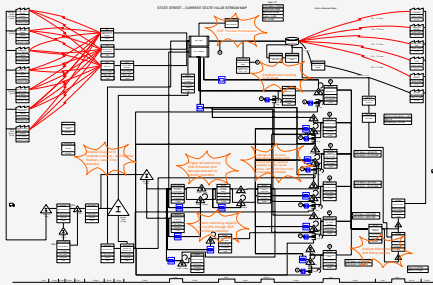
# Project Charters

Element	Description	Team Charter
Project Description	Provide a brief description of the project, including the problem to be solved, the goals to be achieved, and the expected benefits.	Define the project's purpose, scope, and objectives. Identify the project's sponsor, steering committee, and key stakeholders. Establish the project's governance structure and communication protocols.
Project Objectives	Define the project's goals and objectives, including the expected benefits and the project's success criteria.	Establish the project's key performance indicators (KPIs) and milestones. Define the project's budget, resources, and risks.
Project Risks	Identify the project's risks and develop a risk management plan.	Identify the project's risks and develop a risk management plan. Define the project's risk tolerance and mitigation strategies.

# Resource Plans

Resource	Start	End	Units	Cost	Notes
Resource 1	2023-01-01	2023-03-31	10	\$100,000	Resource 1
Resource 2	2023-01-01	2023-03-31	5	\$50,000	Resource 2
Resource 3	2023-01-01	2023-03-31	3	\$30,000	Resource 3
Resource 4	2023-01-01	2023-03-31	2	\$20,000	Resource 4
Resource 5	2023-01-01	2023-03-31	1	\$10,000	Resource 5

# VSM's



Cell Measures

Daily Morning Market

Weekly Perf Summary

Yearly Hoshin

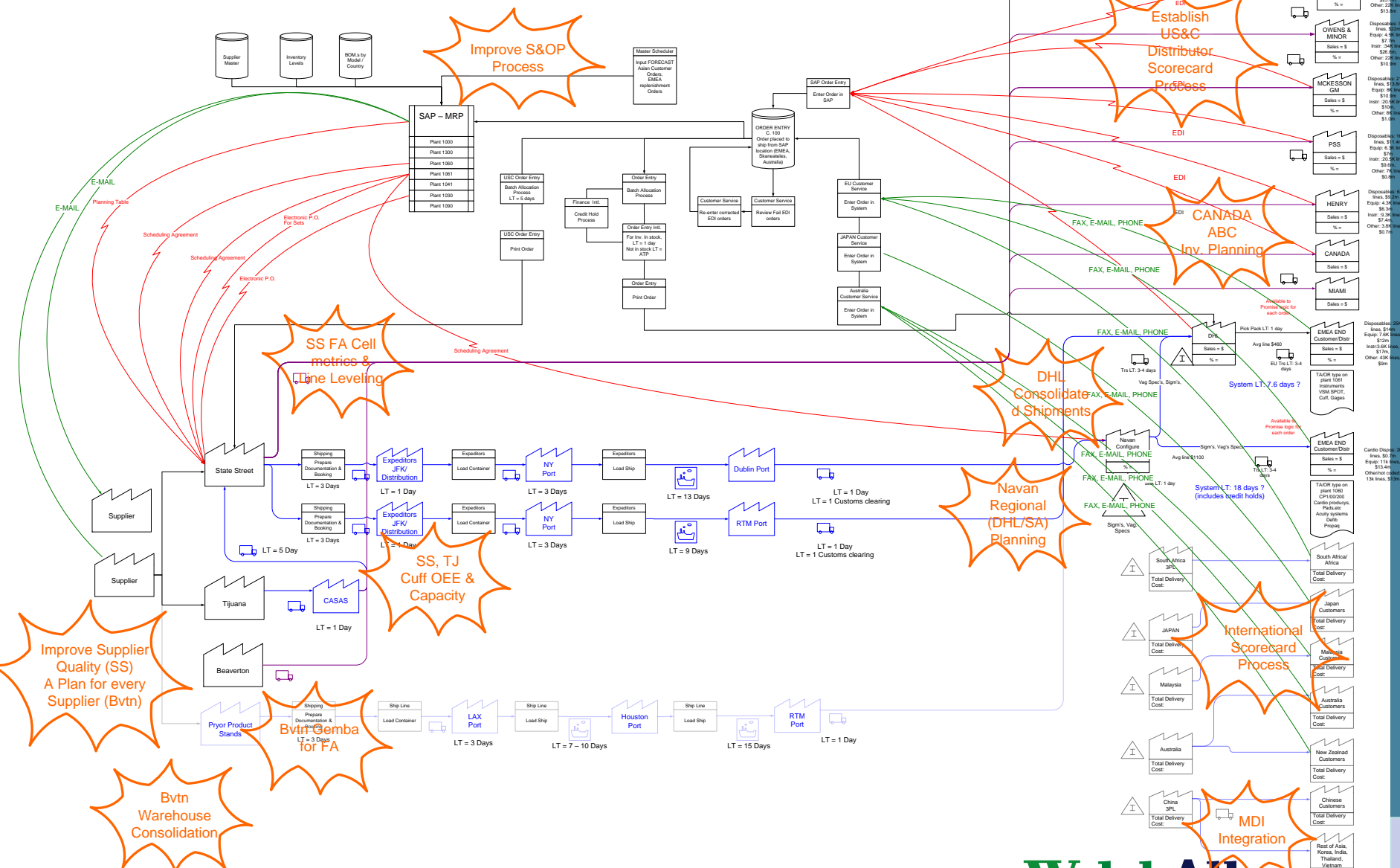
# Dashboards



Gemba,  
Kaizens,  
Level 1 Plans

# Current State VSM with Projects

## CUSTOMER STOCK REPLENISHMENT VALUE STREAM MAP Road & Ocean



# Corporate Shared Objectives 2009 and 2010

- 1) Platform
- 2) Business Development
- 3) Supply Chain

# 2009 Supply Chain Objective/Goals

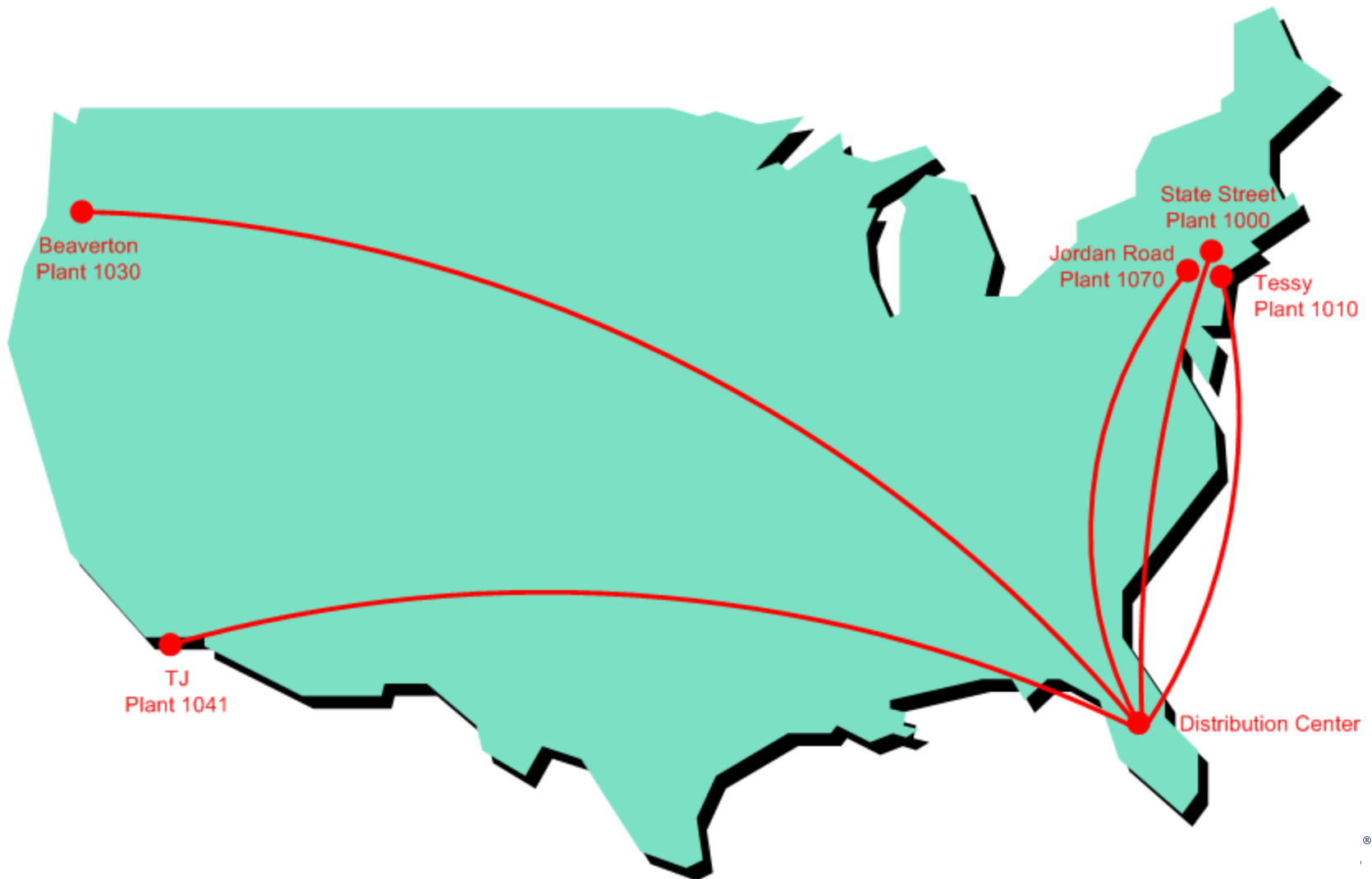
- **Objective:**
  - Build a capable supply chain team and architect a future supply chain vision based on lean principles that will enable WA to significantly improve customer scorecards and/or drive other valuation globally.
  - Define and implement the next phase of supply chain projects that deliver improved customer performance while improving or maintaining both supply chain costs and overall inventory turns.
- **2009 Goals**
  1. Develop a capable global supply chain team
  2. Finalize US&C and International customer facing supply chain scorecards
  3. Execute the next phase of internal supply chain projects at each facility (15 to 20)
  4. Define and deliver progress on two (2) customer facing projects
  5. Improve key performance indicators
    - On-time delivery
    - Supply chain cost as a % of revenue
    - Inventory turns
- **Significant Progress on All 2009 Goals**

# **SKF Consolidation Project**

One Small Step

Completed Nov. 2009

# Current State (1H2009)



# Dec 2009 State (Post SKF consolidation)



# 2010 Supply Chain Objectives

# Welch Allyn Supply Chain Summary

- ✓ Started Lean Global Supply Engine in 2009
- ✓ Shifting focus to customer facing metrics
  - ✓ 1 order = 1 shipment = 1 invoice
  - ✓ Avg lead time from 14 Days to < 7 days (for limited SKUs)
- ✓ Present a single face to customer rather than individual plants
- ✓ Initiate and execute customer centric projects to improve overall satisfaction
- ✓ Reduce total delivered cost to customer
- ✓ Maintain FITs for 2010 then Improve 2011 ->

# MDISCC/Industry Ideas

- 1) Reduce Cost via Consolidated Transportation across several manufacturers for “Shared Ship To Locations” to enable migration from Parcel -> LTL -> FTL/Milk Runs.
- 2) Partner with Distributors/Customers to Regionally Pattern Demand to enable smoothing, lower logistics costs and improved service levels.  
Example = NE ship to locations place weekly order Monday for delivery following Monday, SE orders Tuesday for delivery following Tuesday etc.