



The Development of a CSA Smart Supplier – A Case Study

Omega Precision

Leveraging CSA Partner Relationships



Introduction to Omega Precision

- Founded more than 40 years ago
- Reputation for performing close-tolerance machining on a wide variety of materials
- Operating in a 16,000 square foot facility in Santa Fe Springs
- Specializes in complex precision machining
- Employs thirty highly-skilled craftsmen and professionals using state-of-the-art manufacturing technology.



The Omega Precision Mentor Protégé Story

- CMTC began working with Omega Precision in late 2006 as part of the Mentor Protégé program sponsored by Boeing and Project Managed by Cerritos Community College.
- Omega Precision has responded to the desire of primes to provide higher levels of value and integrated solutions, by developing a widened range of subcontractors as well as the capability to manage them.
- This has resulted in Omega Precision being selected by Boeing as Supplier of the Year in May 2008. These improvements have also resulted in the company winning a large program requiring the use and management of several sub-tier contractors.
- Omega Precision's ability to improve in their supply chain management capability has resulted in an increase in business of more than 15% over the last year.



The CSA WIRED Program Helped to Take Omega Precision to the Next Step

- CMTC applied the resources afforded through the CSA WIRED Department of Labor program to further develop supplier assessments to determine how well a supplier meets the “Smart Supplier” requirements

Smart-Supplier Requirements

A Three Dimensional Perspective

1. Looking Upstream in the Supply Chain

(What does my customer want?)

- ITAR compliance
- Capabilities for involvement with design collaboration – New product design, DFMA, Engineering Analysis, NDT, Prototyping, DFSS
- Metrics in place for On Time Delivery
- Risk analysis and mitigation planning
- Establish cooperative relationships and effective coordination
- Maximize flexibility and responsiveness
- A workforce development plan in place
- Pursue supplier-integrated product and process development

Smart-Supplier Requirements

A Three Dimensional Perspective

2. Looking Within the Enterprise

(What are my capabilities?)

- A Culture of Improvement - Management commitment, Infrastructure
- Visual Workplace - Value Stream Mapping, 6S, Visual Controls
- Lean Product Development - DFMA, Flattened BOM
- Process Focus - Continuous Flow, Parts Presentation, Cellular Mfg, Right-sized equipment, Operator versatility
- Just In Time - Inventory Levels, Pull Systems, Load Leveling, Single Piece Flow, Set-up Time Reduction, Takt Time
- Control of Processes - Mistake Proofing, Six Sigma, Self-Verification, Root-Cause Analysis, TPM
- Standard Work - Defining, Cycle Time, Sequencing, Standard WIP
- Continual Improvement - Kaizen, Performance Measures, Quality Management System, Six-Sigma, SPC

Smart-Supplier Requirements

A Three Dimensional Perspective

3. Looking Downstream in the Supply Chain

(What do I need from my suppliers?)

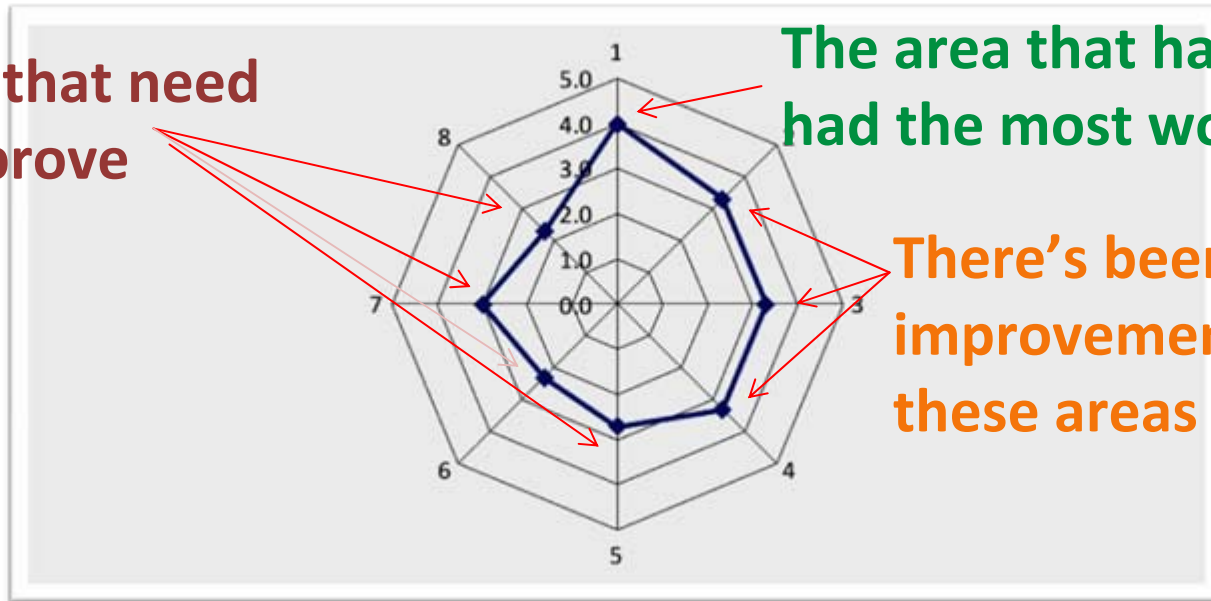
- Design of the supplier network architecture
- Development of complimentary supplier capabilities
- Creation of flow and pull throughout the supplier network
- Cooperative relationships and effective coordination throughout the supplier network
- Maximize flexibility and responsiveness
- Pursue supplier-integrated product and process development
- Integrate knowledge and foster innovation
- Demonstrate continuous performance improvement

Supply Chain Management Self Assessment

- Adopted from work that CMTC did with the Lean Aerospace Initiative
- Looks at eight core processes that are key to developing a lean supply chain
- Evaluates several enablers for each of the eight core processes
- Establishes the current level of development in each area
- Establish a basis of measuring future improvement.

The Assessment Tells Us

Areas that need to improve



- **1. DESIGN SUPPLIER NETWORK ARCHITECTURE**
- **2. DEVELOP COMPLIMENTARY SUPPLIER CAPABILITIES**
- **3. CREATE FLOW AND PULL THROUGHOUT THE SUPPLIER NETWORK**
- **4. ESTABLISH COOPERATIVE RELATIONSHIPS AND EFFECTIVE COORDINATION**

- **5. MAXIMIZE FLEXIBILITY AND RESPONSIVENESS**
- **6. PURSUE SUPPLIER-INTEGRATED PRODUCT AND PROCESS DEVELOPMENT**
- **7. INTEGRATE KNOWLEDGE AND FOSTER INNOVATION**
- **8. DEMONSTRATE CONTINUOUS PERFORMANCE IMPROVEMENT**

CMTC Transformation Planner

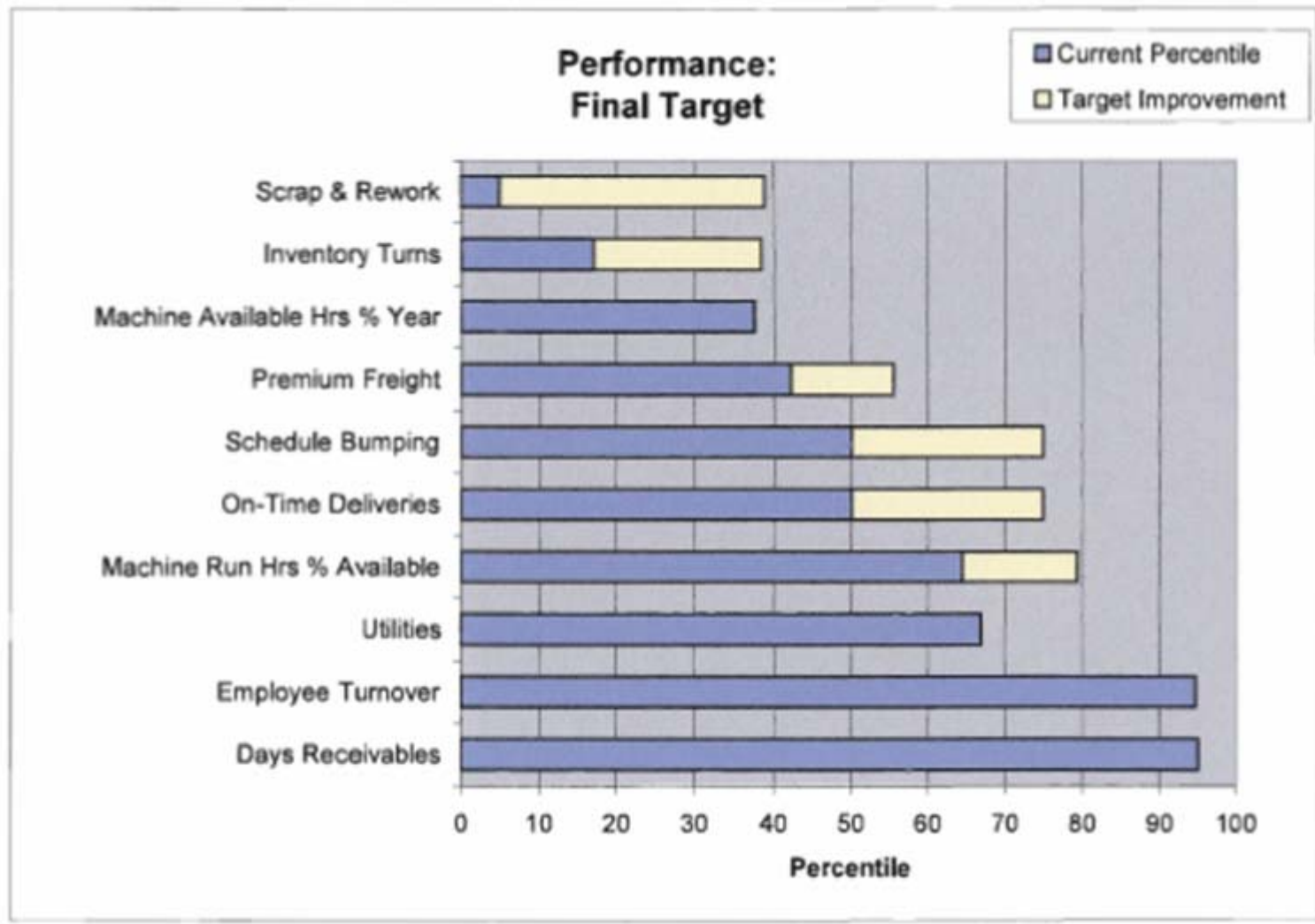


Omega Precision

Aircraft/Aerospace suppliers



Defining the Current and Future States Graphically



We Still Have Work to Do

The areas showing the greatest need for improvement are:

- Scrap and rework
- Inventory turns
- Schedule bumping
- On-time delivery
- Machine run hours - % available