Measuring Lean Six Sigma Program Development

Michele Burk and Deborah Hopen
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Learning Objectives

- Become familiar with the Six Sigma Maturity Model™
- Review how that model was used to devise a framework for measuring Lean Six Sigma program deployment
- See samples of the NRNW dashboard
- Share how the measurement system and dashboard are used to set expectations and foster implementation
Background

- Department of Defense Directive
- Department of Navy Memorandum
- Top leadership support
  - Secretary of the Navy had LSS experience when he took the position, including Champion and Green Belt training
- Commander, Navy Installations Command (CNIC)
  - Mission: To enable and sustain Fleet, Fighter, and Family readiness through consistent, standardized, and reliable shore support

Background

- Navy Region Northwest leadership
  - Committed Commanding Officer
  - Early launch and investment in training
  - Clear focus on converting early experiences into deployment program improvements
Six Sigma Maturity Model™

- Published by iSixSigma®

- Defines five evolutionary levels of deployment
- Provides a framework
  - Benchmarking
  - Assessing progress and identifying gaps
  - Developing corrective action plans
  - Communicating progress

Levels 1 and 2: Launch and Early Success

- Adopt LSS approach
  - Set direction
  - Conduct initial training
  - Begin demonstration projects

- Build commitment
  - Communicate results of first projects
  - Increase pool of believers
  - Compile results
Levels 3 and 4: Scale/Replication and Institutionalization

● Expand reach
  ◦ Increase buy-in across all functions and levels
  ◦ Tackle more varied projects, including some with broader scope and greater complexity

● Integrate into standard operations
  ◦ Gain significant, sustainable results
  ◦ Demonstrate organization-wide success
  ◦ Create project pipeline/portfolio
  ◦ Link to expected behaviors

Level 5: Culture Transformation

● Ingrained in values and strategies
  ◦ Projects tied to strategic plans and goal attainment at all levels
  ◦ Results positively impacting customer satisfaction and overall business performance
  ◦ Ability to lead/participate in projects, applying the process and tools, is a core competency
  ◦ Progress reviewed regularly at all levels with gaps identified and addressed quickly
  ◦ Closed-loop system
Purpose of Dashboard

- Provide a roadmap for integrating LSS with the strategic and business plans
  - Provide Commanding Officers and Directors with straightforward criteria to describe transitions between maturity levels
  - Communicate behaviors and actions necessary to generate permanent cultural change
  - Track the rate of progress
  - Identify issues requiring corrective action

Design Considerations

- Balances activity-based measures that can cause undesirable behaviors with results-oriented measures
  - Avoids focusing on “numbers for numbers sake”
- Minimizes excessive administration effort while maximizing reporting capability
- Provides a means of assessing overall performance and comparing unit performances
Two-Dimensional Approach

- People
  - Incorporates ratings related to leadership, training, program participants’ level of engagement, and culture

- Project portfolio
  - Incorporates ratings related to project complexity and magnitude of results

Metrics: People

- Number/percent of trained and active staff members by level (Champion, Black Belts, Green Belts, and Yellow Belts)
- Number/percent of people trained and using the project tracking system (CPIMS)
- Participation rates in community of interest programs/events
**Metrics:**

**Projects**

- Number of project ideas generated
- Number of active, assigned, and completed projects
- Level of benefits obtained
  - Cost reduction and avoidance
  - Cycle time improvement
  - Safety and quality of work life improvement

**Confidence Factor Scoring**

- Combines ratings from the two-dimensions to obtain an overall score and trend data for each unit and the Region
  - Training effectiveness
  - Project effectiveness
  - Involvement level
  - Execution of business plan
Goals are set at the Region level with visibility at the Program Director and CNIC Headquarters levels.

Demonstration

- An Excel file will be used to demonstrate the Program Assessment Model.
**CPI/LSS Snapshot**

**CNRNW LSS Training**

- **Trained & Available**
  - Champions: 90
  - Black Belts: 0
  - Green Belts: 2
  - Yellow Belts: 0
- **Scheduled**
  - Champions: 162
  - Black Belts: 2
  - Green Belts: 56
  - Yellow Belts: 0

**Update / Way Ahead**
- Training schedule
- Deployment of trained staff members
- Recognition

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**CPI/LSS Snapshot**

**CNRNW Project Portfolio**

- **Projects Completed**
- **Project Ideas**
- **Ideas Assigned**
- **Active Projects**

**Project Status**
- Project identification
- Project execution
- Customer and employee input
Sample Progress Chart

Graphical depiction of goals vs program progress

Take Aways

- NRNW’s CPI/LSS program assessment approach
  - Based on widely accepted model
  - Generates a straightforward description of expectations that leaders and program participants understand and can use to evaluate progress
  - Provides guidance on how to incorporate CPI/LSS in daily operations and strategic planning
Contact Information

● Michele Burk
  ● Michele.burk@navy.mil
  ● 360-315-5081 (DSN: 322-5081)