

Support Function Alignment

SPL 5.1

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These materials were developed as part of MIT's ESD.60 course on "Lean/Six Sigma Systems." In some cases, the materials were produced by the lead instructor, Joel Cutcher-Gershenfeld, and in some cases by student teams working with LFM alumni/ae. Where the materials were developed by student teams, additional inputs from the faculty and from the technical instructor, Chris Musso, are reflected in some of the text or in an appendix

Overview

- Learning Objectives
 - Understand the role of support functions in enabling and constraining lean / six sigma transformation
 - Focus on specific challenges in a range of support functions
- Session Design (20-30 min.)
 - **Part I:** *Introduction and Learning Objectives (1-2 min.)*
 - **Part II:** *Key Concept or Principle Defined and Explained (3-5 min.)*
 - **Part III:** *Exercise or Activity Based on Field Data that Illustrates the Concept or Principle (7-10 min.)*
 - **Part IV:** *Common “Disconnects,” Relevant Measures of Success, and Potential Action Assignment(s) to Apply Lessons Learned (7-10 min.)*
 - **Part V:** *Evaluation and Concluding Comments (2-3 min.)*

Enterprise Level: Customer/Supplier, Matrix and Network Structures to Support Lean Systems

Support Functions – Matrix Structure

Value Streams – Customer/Supplier Structure

Conception...Design...Production...Distribution...Sales...Sustainment

Finance
and Pur-
chasing

Human
Resources

Inform.
Systems

Mainte-
nance

Materiel
Handling

Other
Support
Functions

Extended Enterprise – Network Structure

Suppliers, Strategic Alliances, Regulatory Context, etc.

Support-Function Analysis

- Three Potential Roles
 - Regulator/Enforcer
 - Policies, laws, contractual agreements
 - Service Provider
 - Administration of programs and activities
 - Change Agent
 - Systems change implementation and procedural fairness
- Sample Support Functions
 - Human Resources
 - Finance
 - Materials/Purchasing
 - Quality
 - Maintenance/Engineering
 - Information Systems

Support-Function Exercise: Roles

- Form sub-groups for the following support functions:
 - Human Resources
 - Finance
 - Materials/Purchasing
 - Quality
 - Maintenance/Engineering
 - Information Systems
- Assess what you understand to be the “current state” and the “desired state” for this support function when it comes to lean / six sigma implementation – for each the three roles listed in the following support material.

Adapted from Jan Klein, “The Evolution of HR Professionals from Traditional Managers to Change Agents in Strategic Partnership for High Performance,” Work In America Institute 1995, and from The Critical Path to Corporate Renewal by Michael Beer, Russell Eisenstat, et al., Harvard Business School Press, Boston, MA, 1990

Sample Activities/Competencies -- HR

Role	Sample Activities	Sample Competencies
<i>Regulator/Enforcer</i>	EEO, OSHA, ADA, Collective Bargaining Contract	Legal/technical Detail oriented Risk adverse
<i>Service Provider</i>	Benefits, Recruiting, Compensation, Technical training	Procedure oriented Consistent
<i>Change Agent</i>	Champion for effective Work Groups, OD, Culture change	Innovative/flexible Proactive Risk taking

Sample Activities/Competencies -- Finance

Role	Sample Activities	Sample Competencies
<i>Regulator/Enforcer</i>	Budget compliance, tax and audit regulations	Legal/technical Detail oriented Risk adverse
<i>Service Provider</i>	Payroll and information systems, financial reports	Procedure oriented Consistent
<i>Change Agent</i>	Champion for Total Cost, Linking ERP and process improvement, Work Group analysis of performance data	Innovative/flexible Proactive Risk taking

Sample Activities/Competencies – Materials/Purchasing

Role	Sample Activities	Sample Competencies
<i>Regulator/Enforcer</i>	Material storage rules and regulations, Global purchasing terms and condition	Legal/technical Detail oriented Risk adverse
<i>Service Provider</i>	Delivery of parts and materials, Schedule management	Procedure oriented Consistent
<i>Change Agent</i>	Champion for Material Flow and Just-In-Time Delivery	Innovative/flexible Proactive Risk taking

Sample Activities/Competencies -- Quality

Role	Sample Activities	Sample Competencies
Regulator/Enforcer	QS 9000 and other quality standards	Legal/technical Detail oriented Risk adverse
Service Provider	Quality data; Training in quality skills and tools	Procedure oriented Consistent
Change Agent	Champion for total quality systems and related initiatives	Innovative/flexible Proactive Risk taking

Sample Activities/Competencies – Maintenance/Engineering

Role	Sample Activities	Sample Competencies
<i>Regulator/Enforcer</i>	Scheduled maintenance, ISO 14000	Legal/technical Detail oriented Risk adverse
<i>Service Provider</i>	Equipment repair	Procedure oriented Consistent
<i>Change Agent</i>	Champion for total productive maintenance	Innovative/flexible Proactive Risk taking

Sample Activities/Competencies – Information Systems

Role	Sample Activities	Sample Competencies
<i>Regulator/Enforcer</i>	Adherence to Standards, Protocols, and Policy	Legal/technical Detail oriented Risk adverse
<i>Service Provider</i>	System maintenance, upgrades, and protection	Technical Information Systems expertise Customer/service mindset
<i>Change Agent</i>	Champion for Manufacturing Resource Planning (MRP) and Enterprise Resource Planning (ERP) systems	Innovative/flexible Proactive Risk taking

Functional Analysis Exercise

Current State Daily Operations

Activity **Time/Resource
Allocation**

Regulator/Enforcer _____ %

Service Provider _____ %

Change Agent _____ %

Total: 100%

Future State Daily Operations

Activity **Time/Resource
Allocation**

Regulator/Enforcer _____ %

Service Provider _____ %

Change Agent _____ %

Total: 100%

Conclusions

➤ For Support Functions:

- What are specific implications for support functions in the context of lean / six sigma transformation?
- What are the system barriers that will make this difficult for each support function?
- What specific skill-building activities would be helpful in this process?
- How will you ensure continuity as leaders and staff change?

➤ For Line Management:

- What are line management's reciprocal responsibilities in order for it to be a good "customer" for the support functions?
- What incentives are needed so that the "tension in the matrix" will be valued?