Team/Work Group Structure and Roles – Socio-Tech vs Lean Teams SPL 4.1

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Overview

- ➤ **Learning Objectives**
  - ➤ Understand and effectively incorporate knowledge of alternative team types into lean/six sigma implementation
  - ➤ Consideration of strategy, structure and process for team-based work systems

- ➤ 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.)*

A Historical Counterpoint

"This paper has been written:

First. To point out, through a series of simple illustrations, the great loss which the whole country is suffering through inefficiency in almost all of our daily acts.

Second. To try to convince the reader that the remedy for this inefficiency lies in systematic management, rather than in searching for some unusual or extraordinary man.

Third. To prove that the best management is a true science, resting upon clearly defined laws, rules, and principles, as a foundation. And further to show that the fundamental principles of scientific management are applicable to all kinds of human activities, from our simplest individual acts to the work of our great corporations, which call for the most elaborate cooperation. And, briefly, through a series of illustrations, to convince the reader that whenever these principles are correctly applied, results must follow which are truly astounding.

This paper was originally prepared for presentation to The American Society of Mechanical Engineers. The illustrations chosen are such as, it is believed, will especially appeal to engineers and to managers of industrial and manufacturing establishments, and also quite as much to all of the men who are working in these establishments. It is hoped, however, that it will be clear to other readers that the same principles can be applied with equal force to all social activities: to the management of our homes; the management of our farms; the management of the business of our tradesmen, large and small; of our churches, our philanthropic institutions, our universities, and our governmental departments."

Team Types

	Lean Production Teams	"Socio-Technical" Systems Teams	Off-Line Teams
Origins:	Japan (Toyota Pull System, 1960s)	Scandinavia (Volvo Kalmar, 1970s) and England (coal mines, 1940s)	U.S. (Harmon and GM/UAW QWL groups, 1970s) and Japan (Quality Circles, 1980s)
System Optimizes:	Continuous improvement in work operations	Mix of social and technical sub-systems	Ad hoc problem solving
Expected Yield:	Systematic gains in quality and productivity	Increased worker commitment and targeted gains in quality and safety	Increased worker commitment and reactive response to quality problems
Success Constrained by:	High expectations of team autonomy; Low labor/management support for continuous improvement	High levels of team interdependence; Limited resources for technical redesign	Separation from daily operations
Typically Found in:	Assembly operations (high interdependency among teams)	Continuous production operations (high autonomy among teams)	Broad range of workplaces
Leadership:	Depends on strong team leader	Depends on self-managing group	Depends on group facilitator
Membership:	Common work area	Common work area	May draw on multiple work areas
Organization Structure:	Core building block	Core building block	Adjunct to the structure
Links to Other Teams:	Tightly linked to internal customers and suppliers	Tightly linked across shifts; loosely linked with other teams	Little or no links among teams

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Y=F(X): Structure, Strategy and Process

Y = Effective Team-Based Work System

- **X = Strategy**
  - Teams and the business model
  - What are we optimizing:
    - Cost, Quality, Continuous Improvement, Involvement. . .

- **X = Structure**
  - Team size
  - Team leader role
  - Team member roles
  - Supervisor role
  - Support function roles
  - Internal and external customer and supplier roles
  - Team meeting time
  - Team problem-solving time

- **X = Process**
  - Team meetings
  - Daily team operations
  - Shift-to-shift hand-offs
  - Problem-solving process
  - Issue resolution process
  - Policy deployment process
  - Quality control process
  - Preventative maintenance process
  - Preventative safety process
  - Work re-design process
  - Value stream mapping process

Boundary Spanning

➢ "Boundary spanners" make it possible for people to take initiative and be assertive

➢ Boundary spanners include:
  ➢ Supervisors/Manufacturing Advisors
  ➢ Committeepeople
  ➢ Superintendents
  ➢ Work Group/Team Leaders
  ➢ Work Group members with specific roles, such as recorders, safety contact people, etc.

➢ These are all people who bridge between the Work Group and the larger system
  ➢ Boundary spanners help others to see value in the Work Group's creative ideas
  ➢ Boundary spanners also provide a dose of reality to the Work Group

Team Leader Role Exercise

You are a newly appointed production superintendent, committed to lean/ 6 σ transformation. On your first day in the work area, you are handed the following role definition for a team leader. How might this help or hinder you?

1. Plan, schedule and facilitate team meetings.
2. Facilitate communications between shifts and teams.
3. Solve problems using authority delegated.
4. Plan and coordinate team activities, ensure proper job rotation.
5. Plan and provide or arrange for team member training (OJT or classroom).
6. Promote safety, quality and housekeeping.
7. Promote and ensure constant improvement in the team (e.g., quality, cost and efficiency).
8. Obtain materials and supplies for the team.
9. Be knowledgeable of all operations within team, provide coverage for team members who are away from the work area (i.e., absent, relief, emergency, first aid, etc.)
10. Maintain team records, such as overtime scheduling/equalization, preventative maintenance, attendance, training, etc.
11. Participate in management meetings and communicate the needs of the team.
12. Participate in the evaluation of team members, however, does not have the final word.
13. Responsible for the morale and performance of the team.
14. Schedule vacation of group members.
15. Check on health and welfare of group members.
16. Encourage group to meet responsibilities.
17. Promote suggestion process.
18. Other tasks as determined by the work team.

Team Measurables

➢ Translate the following plant-level metrics into team-level metrics:
  ➢ Safety
    ➢ OSHA first-time visits
    ➢ OSHA lost-time incidents
  ➢ Quality
    ➢ Average First-Time Through performance (FTT)
    ➢ Top ten customer concerns
    ➢ JD Power Quality Rating
  ➢ Cost
    ➢ Hours per "X" (x=plant's primary product)
    ➢ Performance to budget
    ➢ New product launch performance to schedule
  ➢ Maintenance
    ➢ Operational Equipment Effectiveness (OEE)
    ➢ Average Change-Over Time
  ➢ Flow
    ➢ Dock-to-Dock

Concluding Comments

➤ Remember the big three: Structure, Strategy, Process

    ➤ Strategy guides structure

    ➤ Structure drives behavior

➤ Details matter!